

1601 BREAKAWAY ROUND ARM INSTALLATION KIT

DoorKing Part Number

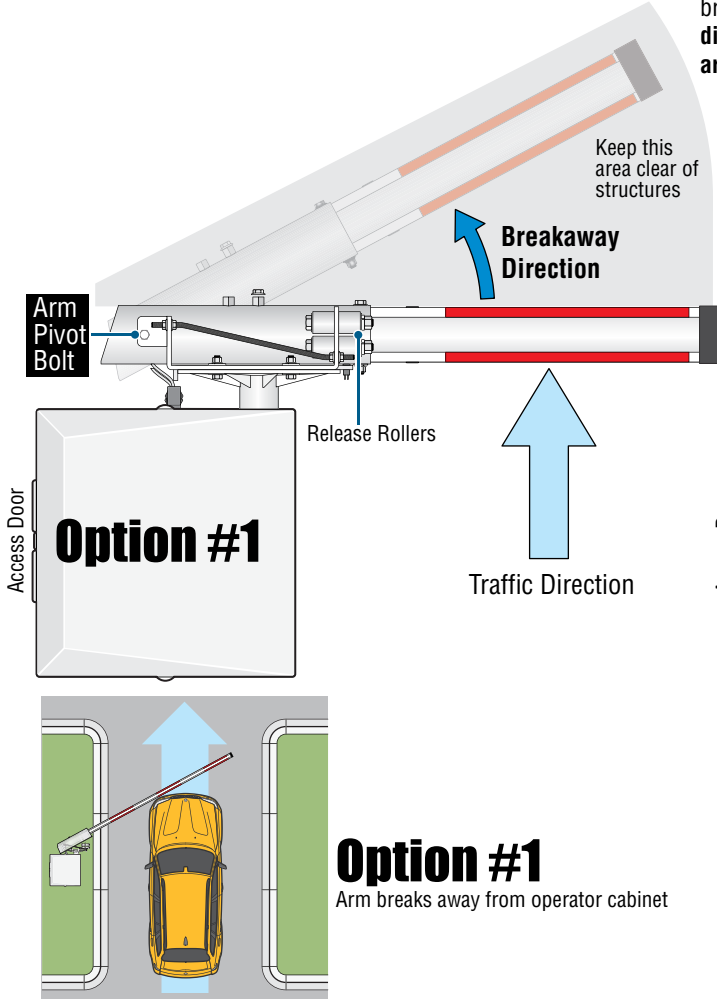
8080-295

This kit is designed for a 1601 barrier gate operator **ONLY**. It **CANNOT** be used with 1602 or 1603 operators. The kit provides a breakaway bracket assembly for a **round arm**.

If the arm is struck and breaks away (pivots 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.

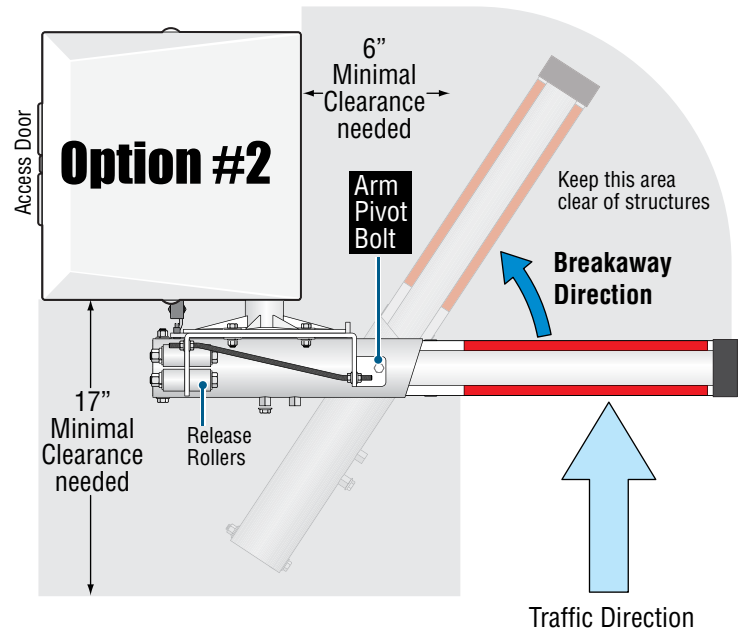
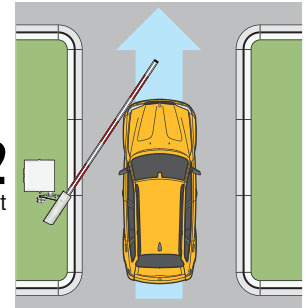
Breakaway Arm Direction Options

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



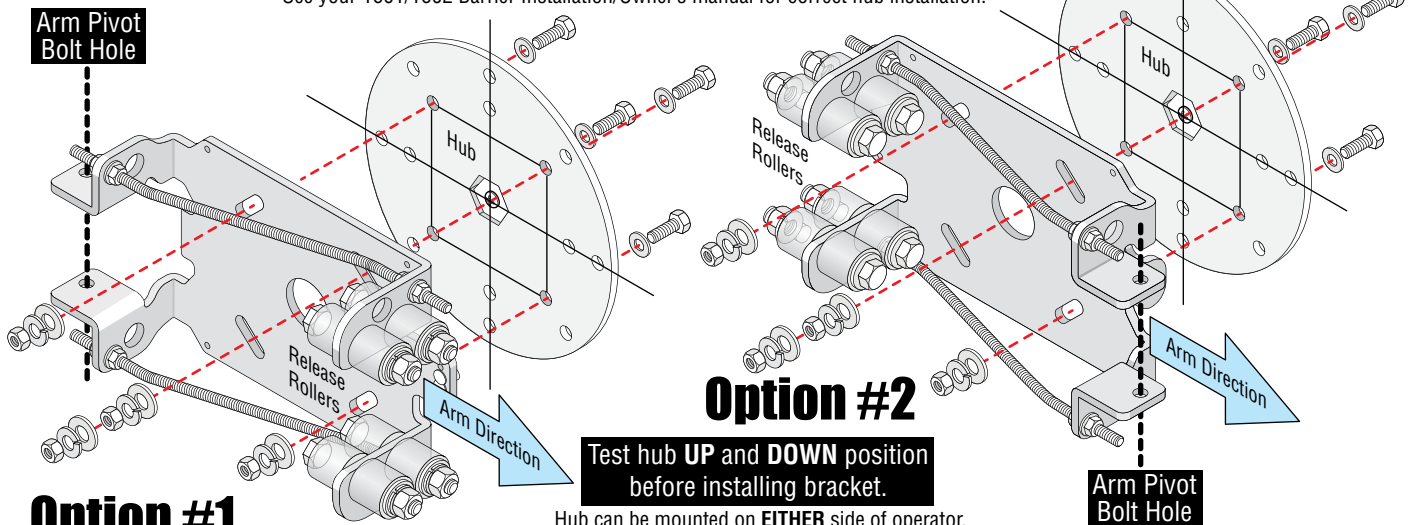
Option #2

Arm breaks towards operator cabinet



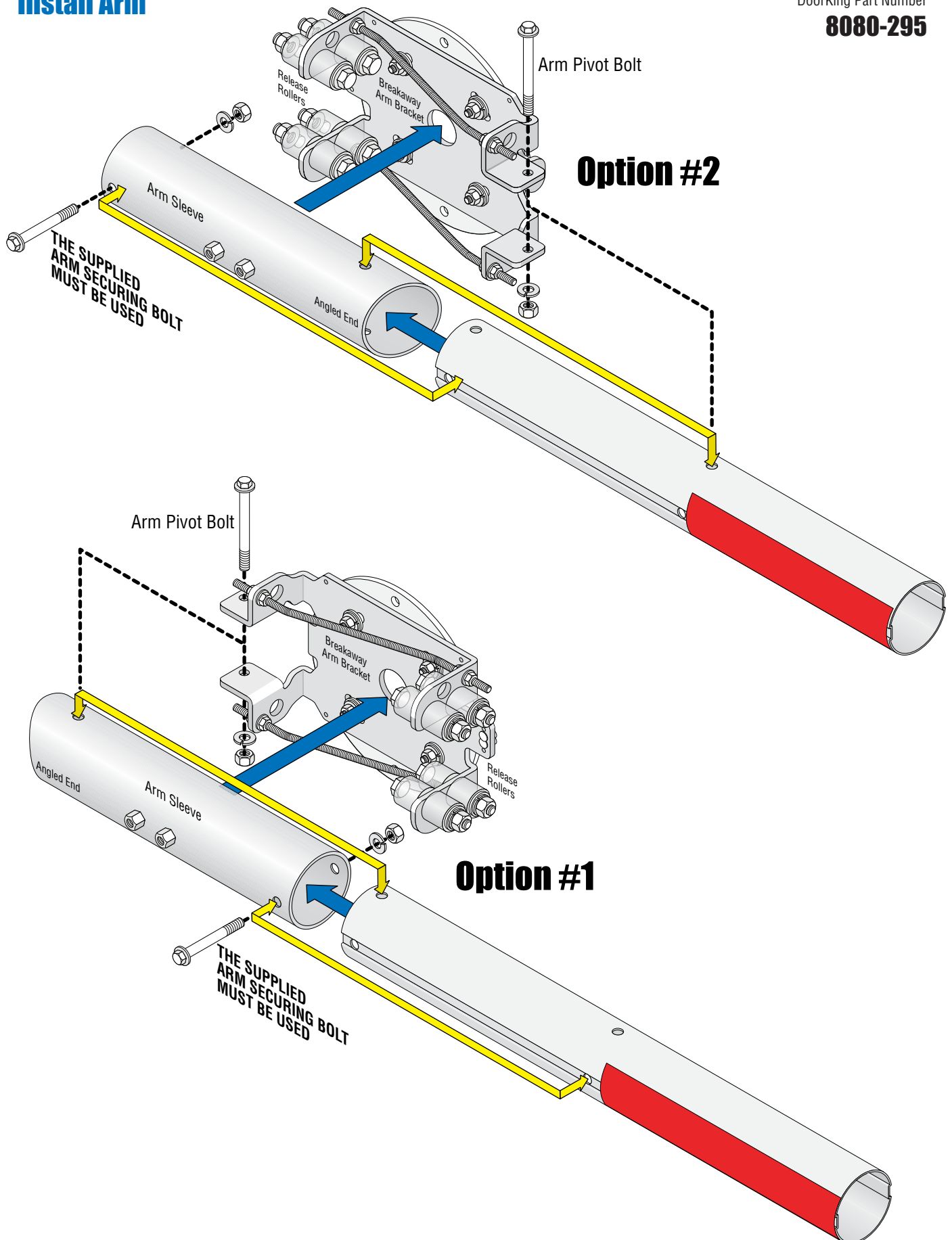
Install Bracket

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



Install Arm

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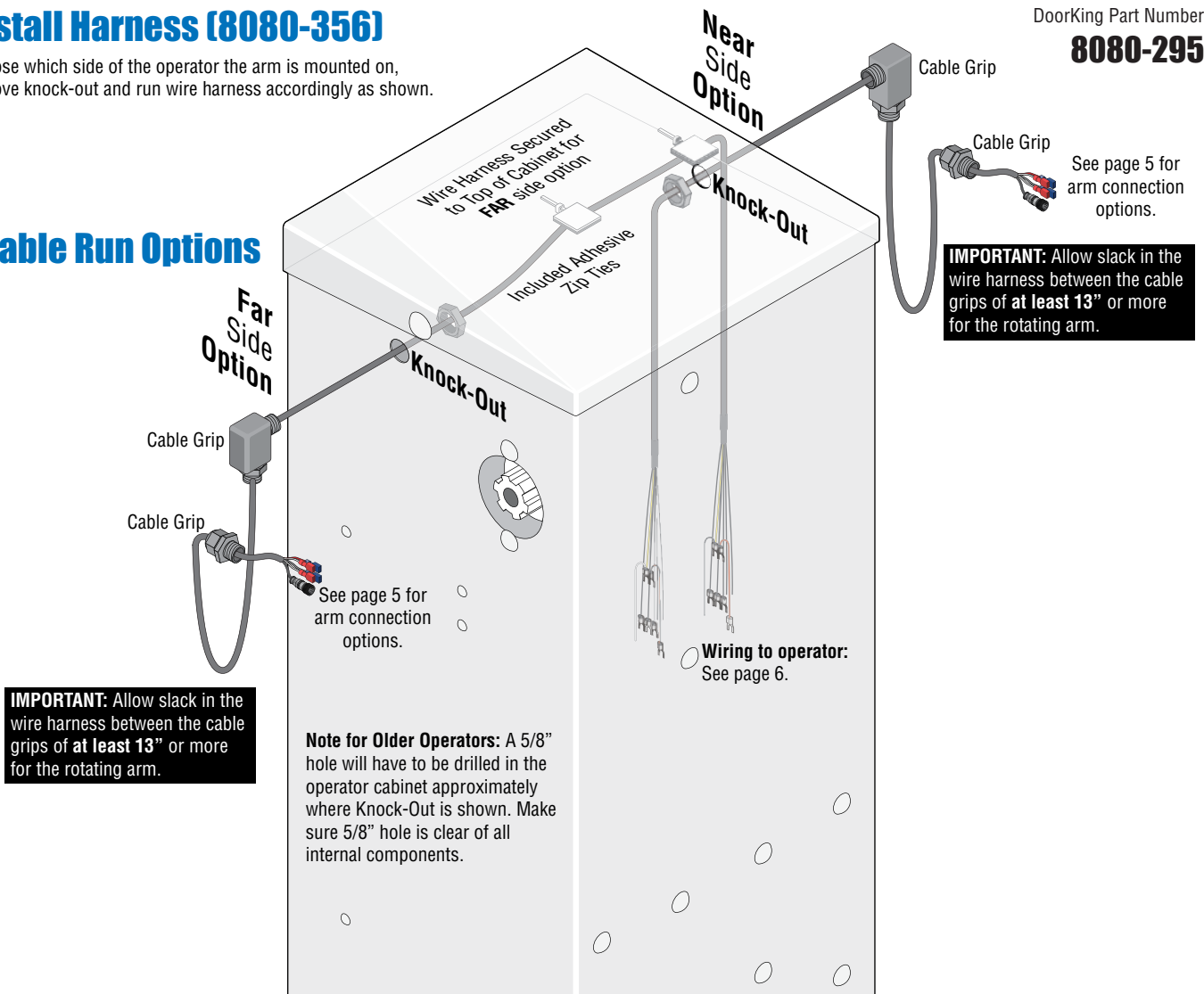
Install Harness (8080-356)

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

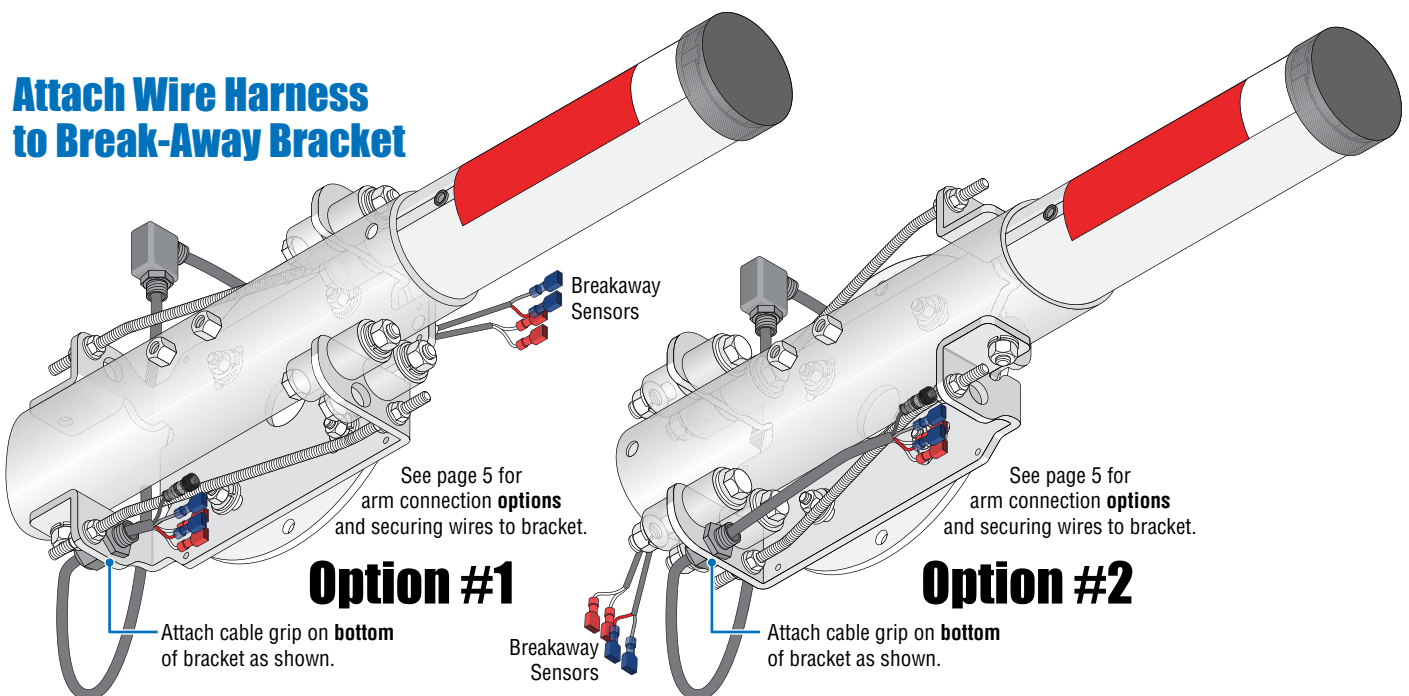
DoorKing Part Number

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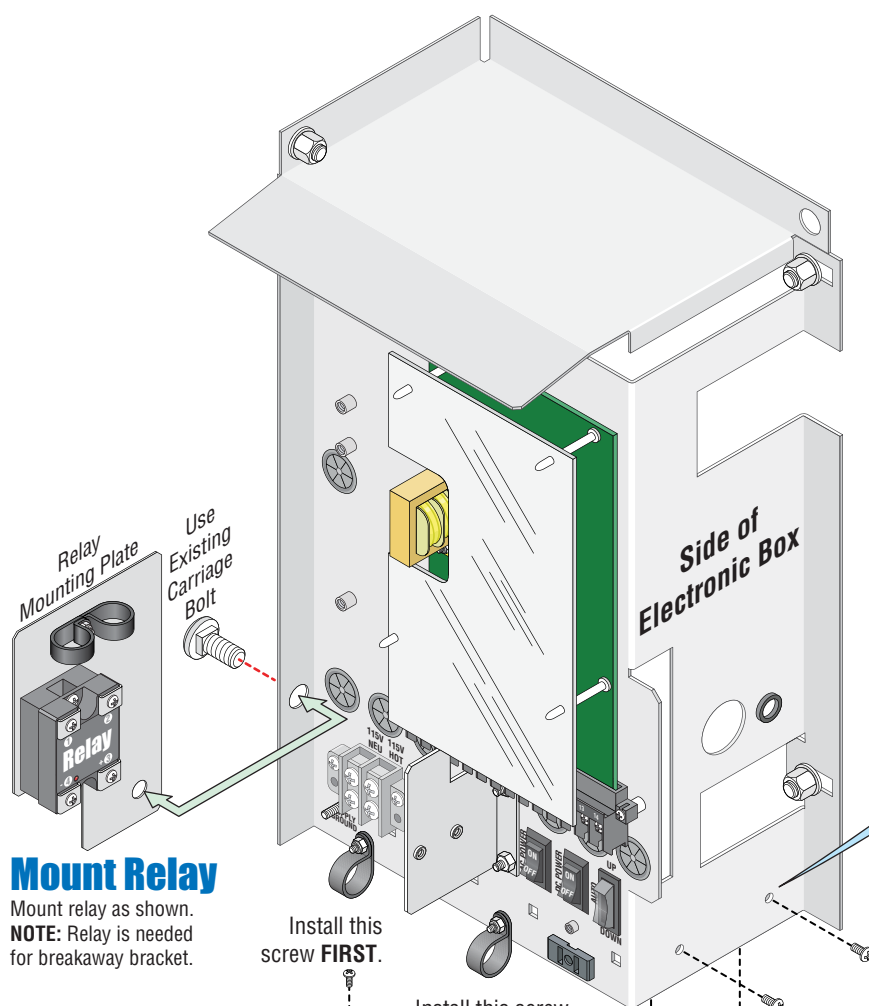
Cable Run Options



Attach Wire Harness to Break-Away Bracket



Mount Power Supply and Relay

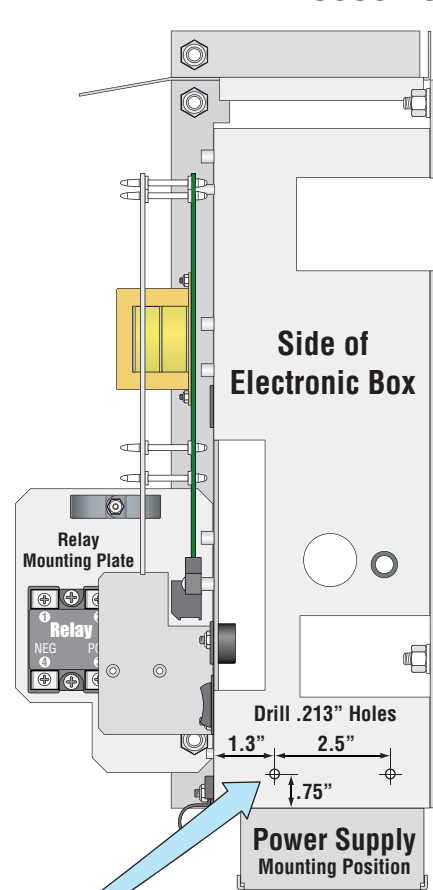


Mount Relay

Mount relay as shown.
NOTE: Relay is needed for breakaway bracket.

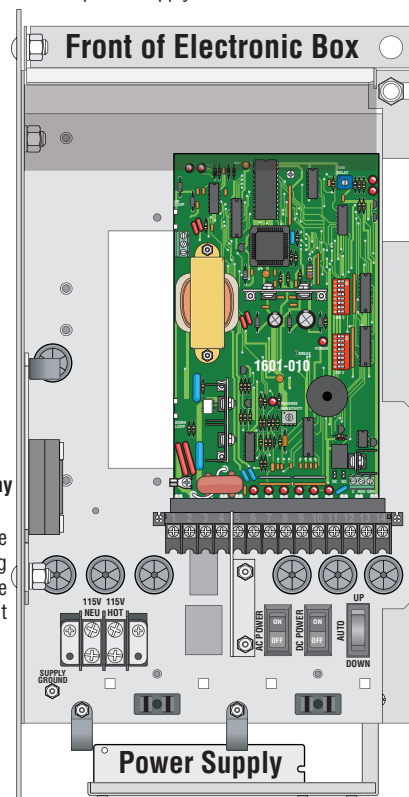
Mount Power Supply

IMPORTANT: Power supply **MUST** be wired **BEFORE** mounting it as shown. See page 6.



Drill Hole Positions

Drill holes in positions shown to mount power supply to side of electronic box.

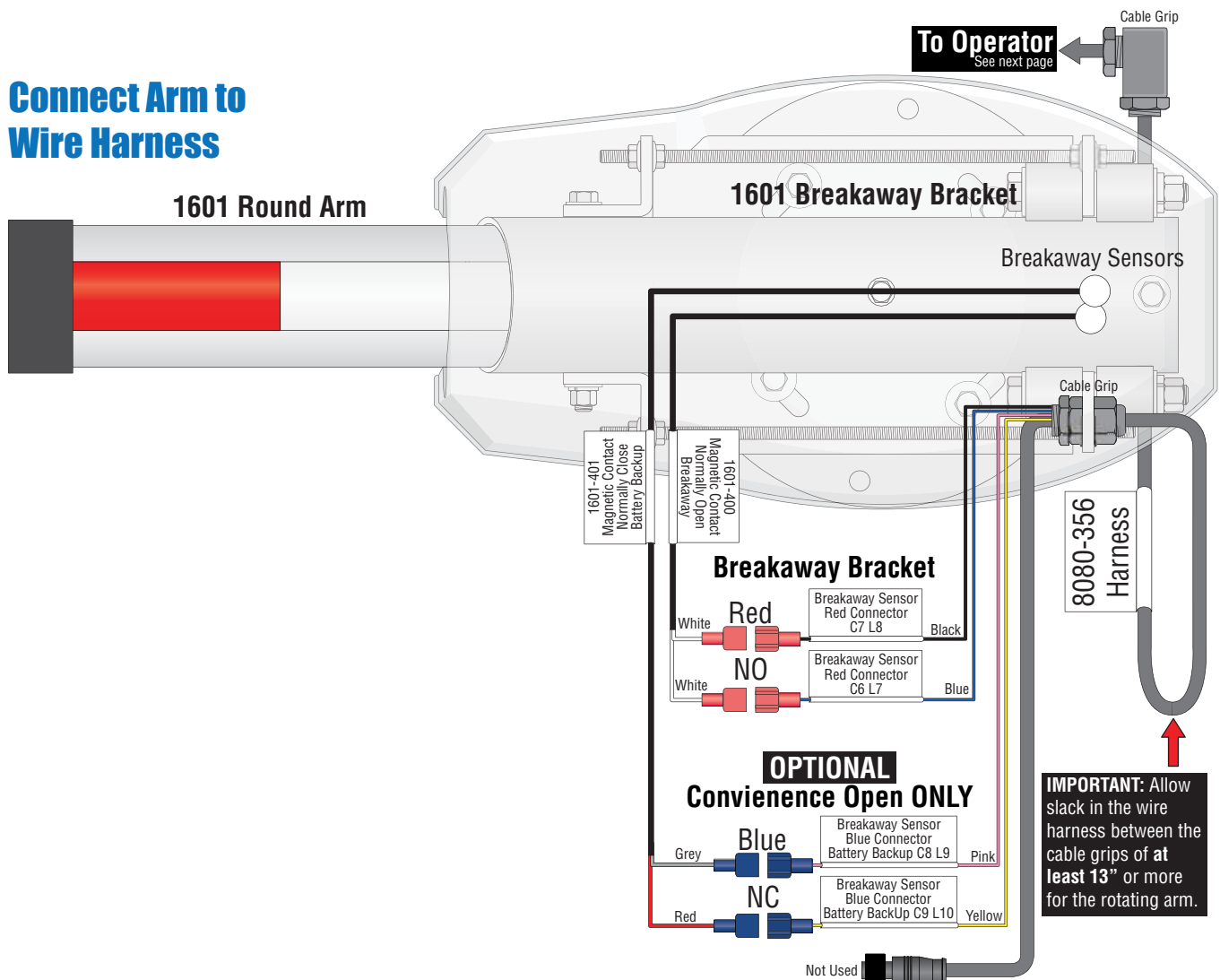


1601 Round Breakaway Arm - Arm Connection

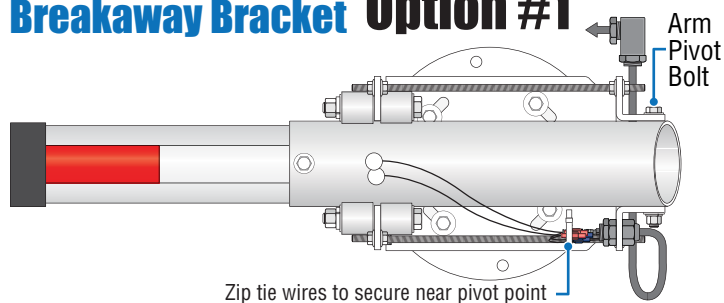
DoorKing Part Number
8080-295

MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

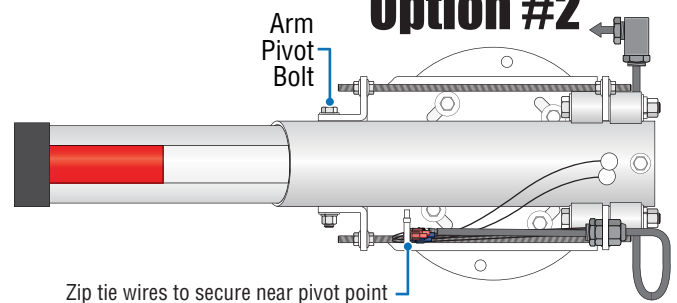
Connect Arm to Wire Harness



Secure Wires to Breakaway Bracket Option #1



Option #2



IMPORTANT: To secure wires to bracket, allow for some slack in the wires to account for the arm pivoting when arm "Breaks Away" from bracket. Test breakaway feature to **make sure** there is enough slack in the wires when securing wires.

Breakaway Arm Reset Procedure

If arm gets struck and breaks away, gate operator will automatically shut down (Breakaway 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.

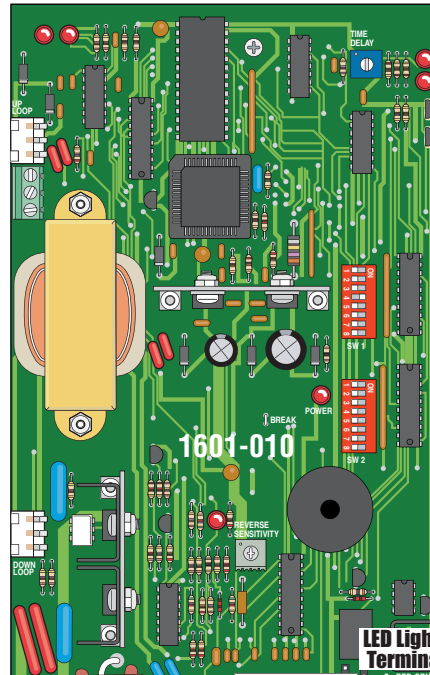
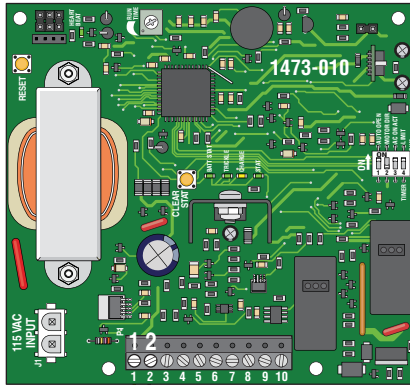
DO NOT OPERATE ARM WITHOUT BREAKAWAY SENSORS FUNCTIONING.

1601 Round Breakaway Arm - Wiring Operator

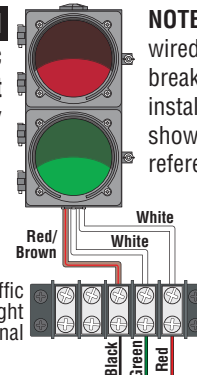
MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

OPTIONAL Convenience Open 1473

NOTE: 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.

Terminal 1
Battery Backup PCB
Breakaway Sensor NC
C9 L15

Terminal 2
Battery Backup PCB
Breakaway Sensor NC
C8 L13

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

Green
Ground Panel Stud L24
Required

White
Terminal 1 - Neutral
Circuit Board
L20

Black
Terminal 2
Main PCB
110VAC HOT L14

Terminal 9
Main PCB
Reverse Edge C5 L5

N-Open
Main PCB
Green Light C2 L2

N-Close
Main PCB
Red Light C1 L1

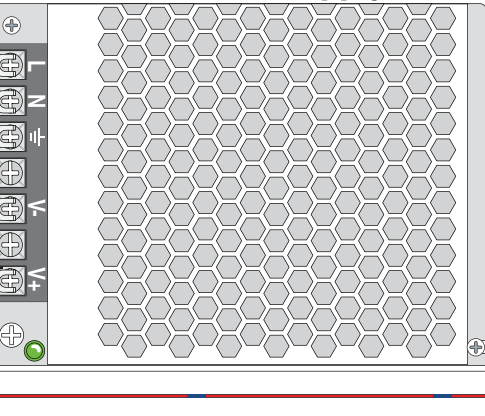
NC - Close - Red
NO - Open - Green

Terminal 14
Main PCB
Reverse Edge C4 L4

8080-356
Harness

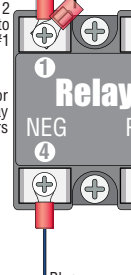
To Arm
See previous page

1601-426 Power Supply 8.5A



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

Pink
Yellow