**1601 BREAK-AWAY OCTAGON ARM INSTALLATION KIT**

This kit is designed for a 1601 barrier gate operator WITHOUT convenience open ONLY. It CANNOT be used with a 1602 or 1603 operators. The kit provides a break-away bracket assembly for an octagon arm with OR without reverse/LED edge ONLY. When the arm is raised, LEDs turn GREEN, and turns RED when lowered and remains RED in the down position. Arm will reverse if lowering and an obstruction is encountered. 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.

**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).

**Installation**

**Install Bracket**

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

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Install Arm

Arm sleeve snaps into release rollers.

**Option #1**

- Octagon Arm
- Spacer
- Optional Reverse/LED Edge
- Cover

**Option #2**

- Arm Pivot Bolt
- Arm Sleeve
- Release Rollers
- Breaking Arm Bracket
- Optional Reverse Edge

**Arm and Reverse Edge Note:**
Arm has already been assembled when using 2-piece arm. See page 7 for more information.
Reverse edge has already been installed on arm. See page 8 for more information.

**Drawings NOT to scale**
Install Wire Harness (1601-355)
Choose which side of the operator the arm is mounted on, remove knock-out and run wire harness accordingly as shown.

Option #1
- Attach wire harness connector on bottom of bracket as shown.

Option #2
- Attach wire harness connector on bottom of bracket as shown.

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.

Note:
- Spacer MUST be in position when installing a reverse edge. See page 8.
Plug in Break-Away Switch (REQUIRED) and Reverse Edge (Optional)

Option #1

Secure ALL Wires to Bracket and Install Cover

Note: The reverse edge plug is not used when not installing a reverse edge.

Option #2

IMPORTANT: Break-Away switch is located between the release rollers and MUST be connected to wire harness.

DO NOT OPERATE ARM WITHOUT BREAK-AWAY SWITCH FUNCTIONING.

Note for Older Covers:
See page 6.

Use included zip ties to secure ALL wires to break-away arm bracket.

IMPORTANT: Allow for some slack in the reverse edge wire to account for the arm pivoting when arm “Breaks Away” from bracket. Test break-away feature to make sure there is enough slack wire.
Wiring

MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

Keep wire harness clear of all moving parts.

(1601-355)

1601 operators WITH convenience open CANNOT be USED.

Install Relay
Use existing carriage bolt on operator to install relay mounting plate.

Older Model 1601 Operator Note: Older model 1601 barrier operator WITHOUT convenience open have TWO existing black wires connected to MAIN Terminal 2. Re-connect BOTH of those wires to RELAY 2.

REMOVE existing black wire connected to MAIN Terminal 2 and re-connect it to RELAY 2.

New Black Wire to Main Terminal 2 (115 VAC power)

Remove existing black wire connected to MAIN Terminal 2 and re-connect it to RELAY 2.

Older Model 1601 Barrier Operator Note: Older model 1601 barrier operator WITHOUT convenience open have TWO existing black wires connected to MAIN Terminal 2. Re-connect BOTH of those wires to RELAY 2.

Red Wire 12V Positive (+) SS Relay / Breakaway

White Wire to Common Arm Relay Contact

Existing Black Wire from Main Terminal 2 to Relay 2

Relay Mounting Plate

Use existing carriage bolt on operator to install relay mounting plate.

Older Model 1601 Operator Note: Older model 1601 barrier operator WITHOUT convenience open have TWO existing black wires connected to MAIN Terminal 2. Re-connect BOTH of those wires to RELAY 2.

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MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

Keep wire harness clear of all moving parts.

(1601-355)

1601 operators WITH convenience open CANNOT be USED.
Older Arm Cover

Older arm cover will need to have the reverse edge cut out of the existing cover. 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.
This kit is designed for use on a 1601 or 1603 barrier gate operators ONLY. It has 2-7 ft arm sections that assemble into a 14 ft arm.

**Assemble Arm**

Slide section of the arm on coupler and secure with screws.

**Note:** Holes are pre-drilled in the arm section, but not in the coupler.

**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.
REVERSE EDGE / RED GREEN LED INSTALLATION

This kit is designed to install on a 14 ft aluminum octagon arm for a 1601 barrier gate operator or a 1603 auto spikes operator. It CANNOT be used with a 1602 operator.

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.

2. Slide on Spacer
   Tip: Liquid soap will help spacer slide on easier.

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

4. Reinstall End Cap
   Push a screwdriver through hole in cap to release spring while pushing cap on. Keep pushing cap on until a “CLICK” is heard which locks it in place.

Note: Spacer MUST be in position.