1601 BREAK-AWAY ALUMINUM ARM INSTALLATION KIT

This kit is designed for a 1601 barrier gate operator ONLY (with or without 1473 board convenience open). It CANNOT be used with a 1602 or 1603 Operators. The kit provides a break-away bracket assembly for a aluminum break-away arm with OR without LEDs ONLY. If the arm is struck and breaks away ( pivots in ONE DIRECTION ONLY, see below), gate operator will automatically shut down. The arm simply snaps back into the release rollers to function normally again.


Optional Aluminum Break-Away Arms Available (sold separately):
Arm WITH LEDs P/N 1601-520   Arm WITHOUT LEDs P/N 1601-522

Installation

Install Arm Pivot Bracket
Hub MUST already be installed on gate operator. See Installation/Owner’s manual for correct hub installation.

This illustration shows OPTION #2 (see below). Arm pivot bracket can be rotated 180° from the position shown to allow arm to release in opposite direction - OPTION #1 (see below). Secure arm pivot bracket with 4 nuts, bolts and washers as shown to hub.

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

Option #1
Option #2

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Inglewood, California 90301 U.S.A.
**Installation Continued**

**Attach Arm**

Snap arm sleeve into release rollers on pivoting arm bracket (Option #2 shown here). Slide aluminum arm into arm sleeve. Align appropriate holes together and slide bolts through aligned holes. Secure bolts.

**Note for Option #1 Installation:** The arm sleeve and pivoting arm bracket will be rotated 180° from illustration shown here.

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**Shorten Arm Length if Desired**

This demonstrates procedure for the aluminum arm with LED lights.

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Peel back reflective tape on both sides of arm. Cut the LED tape with scissors **ONLY where indicated on the tape** or LED wiring inside the tape **WILL GET DAMAGED AND NOT LIGHT**!

Cut arm where desired with a fine tooth saw. Be careful not to damage the LED tape with the saw. Re stick reflective tape back over LEDs. Reinstall plastic end cap over end of arm.
Wire Run Options in Operator Cabinet

Note for Older 1601 Operator ONLY:
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.

Note: Use existing wire restrainers to secure arm wire harness in operator cabinet. Make sure all wires are clear of moving parts.

Mount Arm Wire Harness Connector on BOTTOM hole of bracket. Note: Connector mounting position is different for Option #1. see Break-Away Direction Options on page 1.

Note for Aluminum arm WITHOUT LEDs:
The aluminum arm without the LED lights P/N 1601-522 arm MUST have the magnetic contact switches connected to the barrier gate operator. The LED bullet plugs have power even though they are not used on the P/N 1601-522 arm. It is best to wrap the plugs in electrical tape to protect them from accidentally touching a metal surface.

DO NOT OPERATE EITHER ARM WITHOUT MAGNETIC CONTACT SWITCHES FUNCTIONING.

Wiring Arm Wire Harness

Secure Arm Wire Harness to Bracket
Use included wire restrainer and zip ties to secure ALL wires to pivoting arm bracket after making connections. Allow for some slack in the wires to account for the arm pivoting when arm “Breaks Away” from bracket. Make sure that all wires remain clear of the pivoting arm and the plastic cover.

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1601-286-N-8-19
Install Relay

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

1601 with Convenience Open 1473 Circuit Board

Yellow/Green wire and Orange wire are NOT USED on Standard 1601 operator WITHOUT convenience open.

Older 1601 operator WITH convenience open 2340-010 circuit board CANNOT BE USED.

Convenience Open Operator Note: Leave existing 1473 board blue wire connected to main terminal #2.

Break-Away Arm Reset Procedure

If arm gets struck and breaks away, gate operator will automatically shut down (Magnetic contact switches 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 MAGNETIC CONTACT SWITCHES FUNCTIONING.