Installation Reference Manual

816 LA

Vehicular swing gate actuator



IMPORTANT!

These instructions apply only to the 816 actuator. Control box installation/operation is described in a separate control box manual.





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SECTION 1: 816 ACTUATOR OVERVIEW

Congratulations on selecting a Nice 816 LA actuator for your gate opener system. With proper selection, system design, installation, and maintenance this actuator should provide years of reliable operation. This manual covers ONLY the installation of the 816 actuator.

IMPORTANT!

For control box installation, wiring, operation, maintenance instructions and all safety information, refer to the appropriate control box installation manual used for the system being installed.

816 ACTUATOR SPECIFICATIONS			
DRIVE	Electromechanical		
GATE LENGTH MAX.	16 ft (5 m) leaf		
GATE WEIGHT MAX	600 lb (272 kg)		
OPEN/CLOSE TIME (TO 90°)	14 - 16 seconds (adjustable)		
TEMPERATURE RATING	-4° to 122° F (-20° to 50° C)		
OPERATING VOLTAGE	12VDC		
ACTUATOR DIMENSIONS	42" retracted - 66" extended		
USER CONTROLS	636, 936, or 1050 control board		
LISTED TO UL325	936 & 1050 Control Boards: Usage Class I, II,		

816 ACTUATOR PARTS IDENTIFICATION			
PART#	DESCRIPTION	ΟΤΥ	
816-1	ACTUATOR WITH 12 FOOT HARNESS	1	
816-2 (DUAL GATE ONLY)	ACTUATOR WITH 42 FOOT HARNESS	1	
1116	PIVOT ARM	1	
10025215	GATE BRACKET	1	
1125	ACTUATOR HARDWARE KIT	1	



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SECTION 2: INSTALLATION SAFETY

IMPORTANT!

- The gate operator installation is NOT a "do-it-yourself" project. Contract a qualified gate operator installation company to install this system to ensure a safe and reliable installation.
- It is the responsibility of the property owner to ensure the installer is qualified to carry out the installation in a safe and professional manner.
- Consult local government agencies for up-to-date rules and regulations to satisfy licensing, codes or regulations that regulate automated gate system design and installation.
- The gate for which the gate operator is intended to be used should itself be installed correctly so that it is level and plumb and the gate opens easily and evenly.
- Note that Nice swing gate systems are not intended for installation on an incline.



WARNING!

READ ALL SAFETY INFORMATION IN THE CONTROL BOX INSTALLATION MANUAL WHEN INSTALLING A SWING GATE SYSTEM!

- DISCONNECT POWER AT THE CONTROL PANEL BEFORE MAKING ANY ELECTRIC SERVICE POWER CONNECTIONS.
- BE AWARE OF ALL MOVING PARTS AND AVOID CLOSE PROXIMITY TO ANY PINCH POINTS.

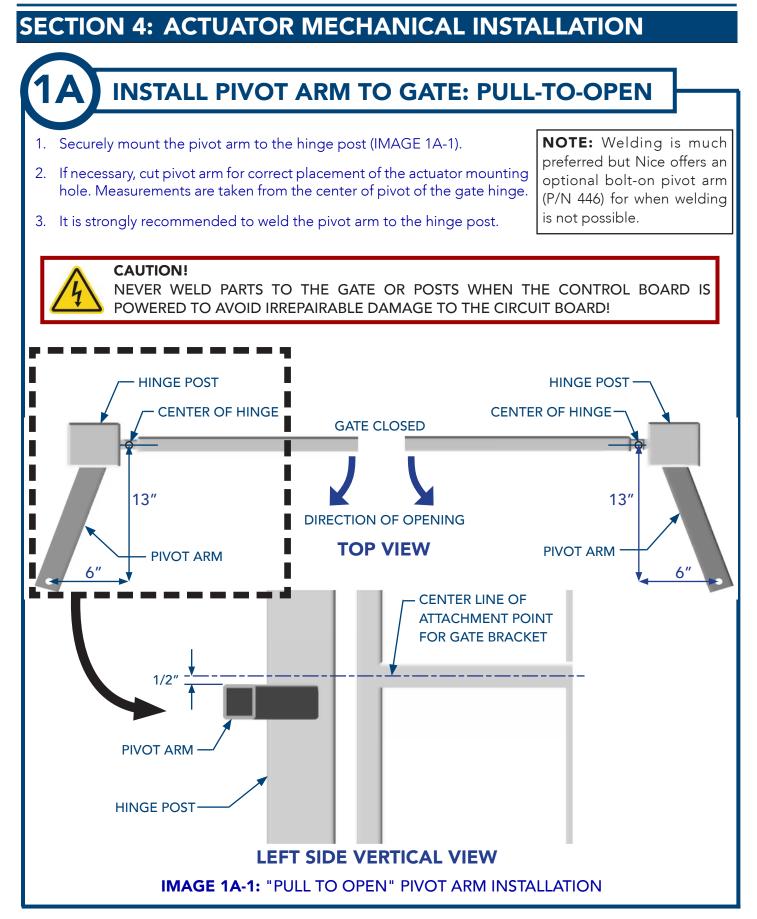
SECTION 3: TOOLS NEEDED FOR INSTALLATION

Below is a list of tools necessary for installation of the 816 actuator:

- Welder (for pivot arm) unless optional bolt-on pivot arm (P/N 446) is used.
- Basic hand tools (screwdrivers, wrenches, pliers, etc..)
- Bubble Level (for ensuring pivot arm and actuator are level).
- Framing square (for determining pivot arm location)

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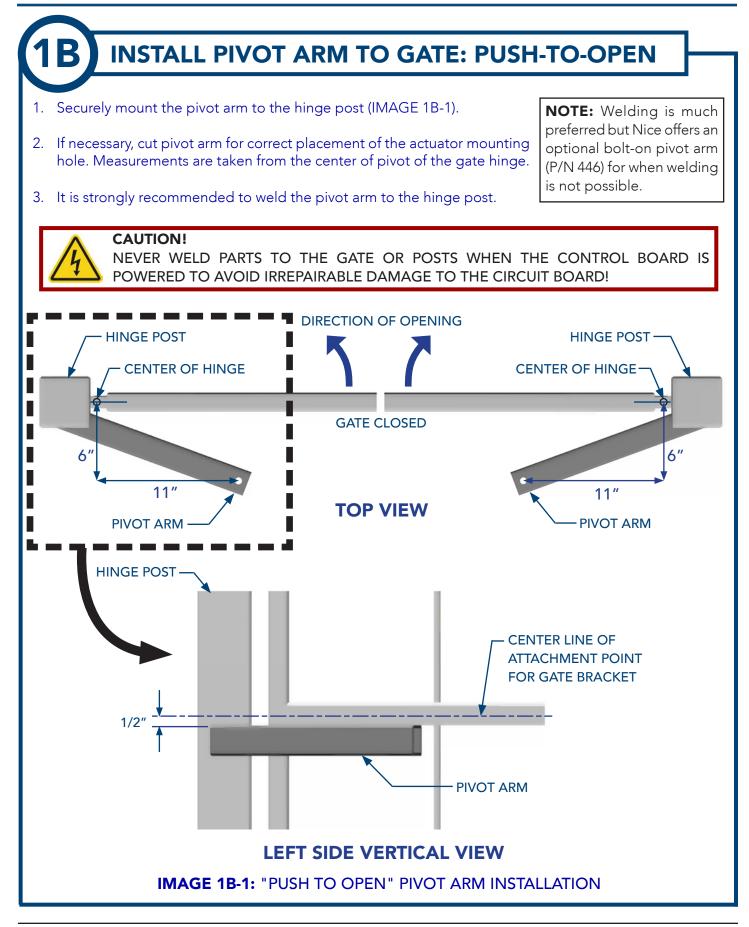




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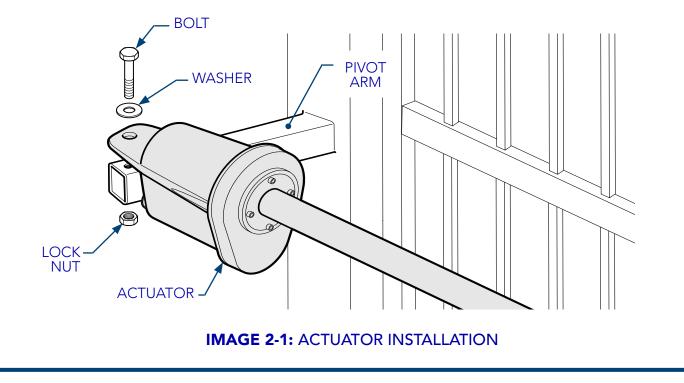


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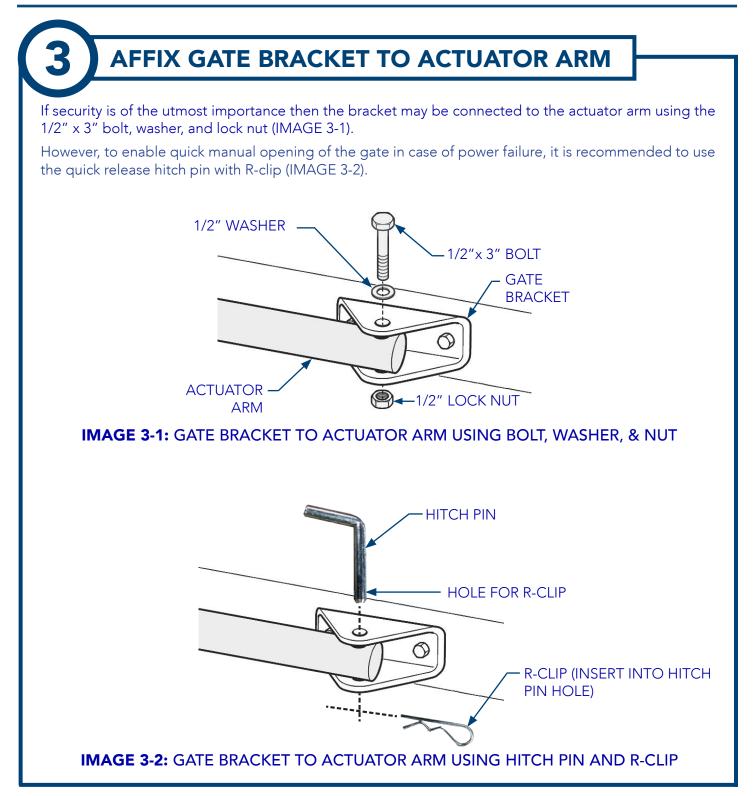
- 1. Mount the actuator to the pivot arm as shown (IMAGE 2-1). Note that the washer goes above the actuator flange.
- 2. Tighten the lock nut to prevent movement or shifting when the actuator is running. This will also prevent excessive "bounce" or "wobble" when the gate stops moving.



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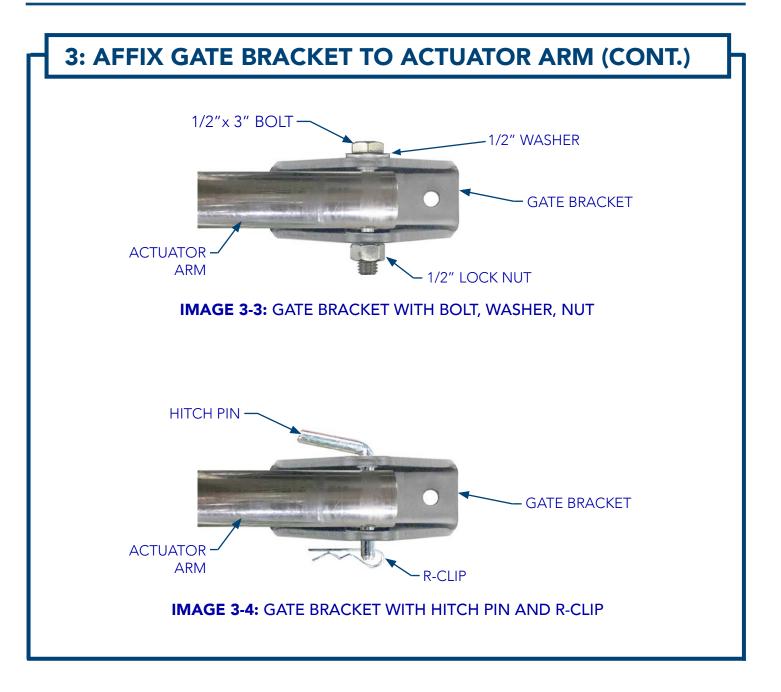


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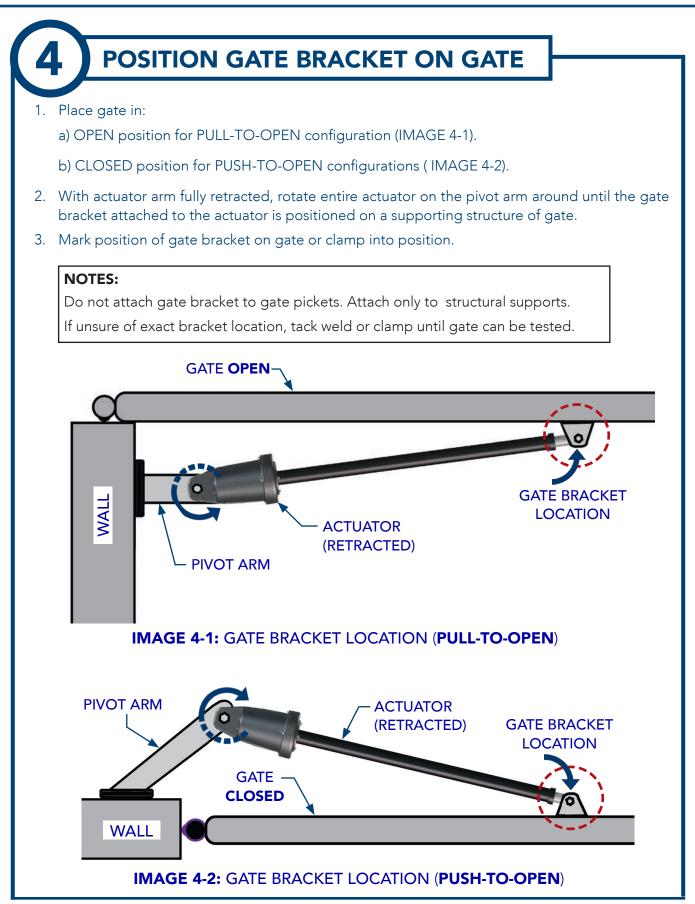




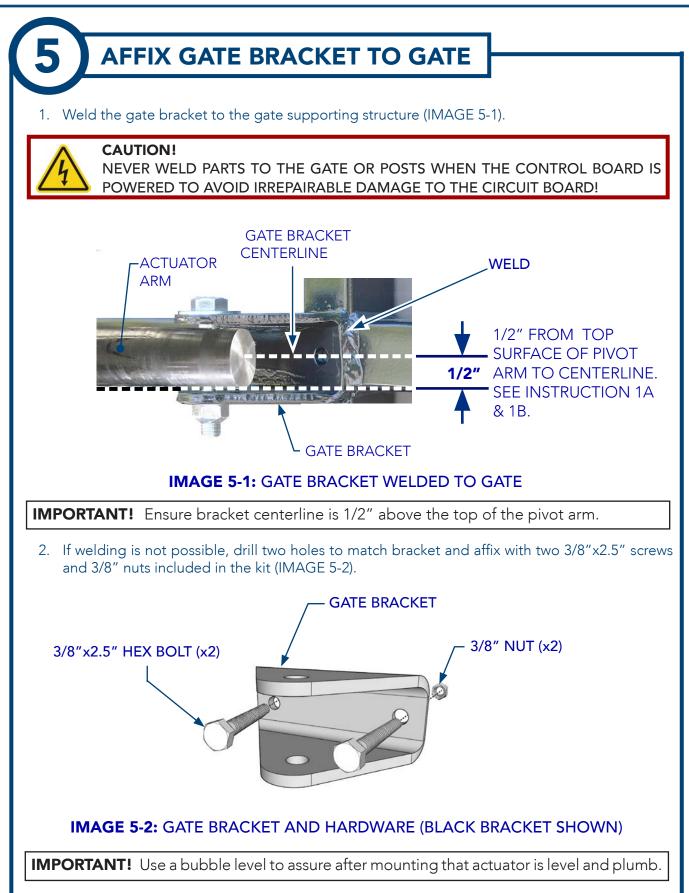
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RUN ACTUATOR CABLE(S) TO CONTROL BOX

Run the cable of the actuator closest to the control box through a hole (with rubber grommet) drilled in the bottom on the control box. If necessary, entry may be made elsewhere on the control box.

If a dual gate installation:

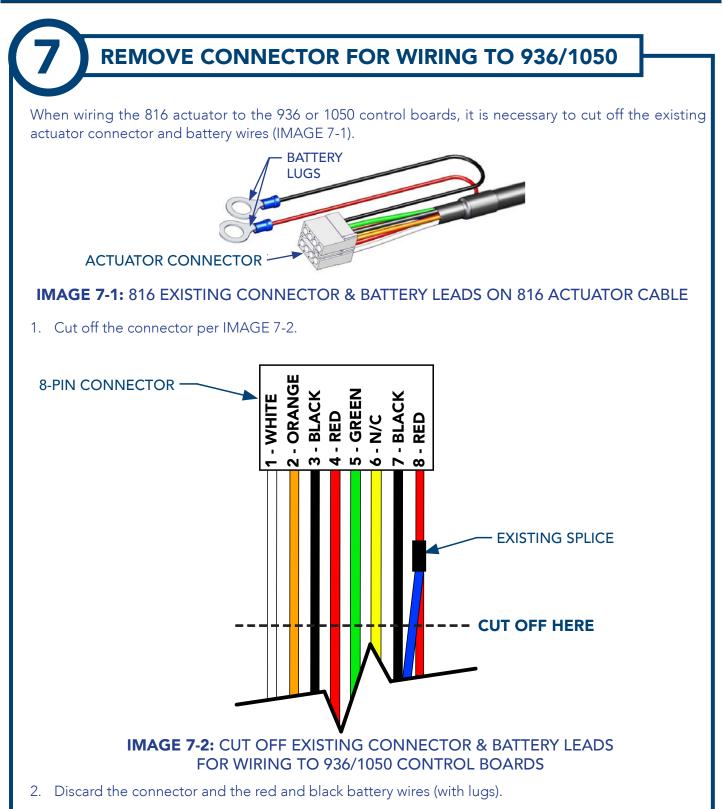
- 1. Dig a trench across the driveway deep enough to accomodate the longer harness cable from the actuator farthest from the control box.
- 2. Run the cable through an appropriae conduit and lay this in the trench.
- 3. Cover the trench and use asphault patch if needed.
- 4. Run the 2nd cable into a hole (with rubber grommet) into the bottom of the control box.

NOTE: Ensure the cable(s) reaches into the control box sufficiently to reach the MOTOR inputs on the control board.

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SECTION 5: ACTUATOR TO CONTROL BOARD CONNECTIONS



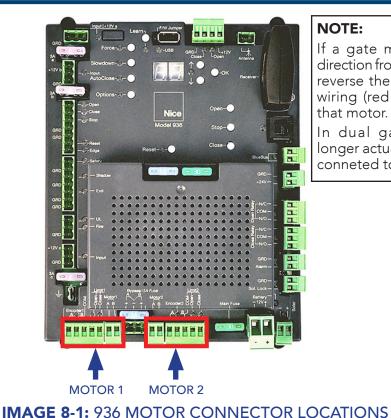
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WIRING ACTUATOR TO 936 CONTROL BOARD 5.1

936 CONTROL BOARD WIRING: PULL-TO-OPEN



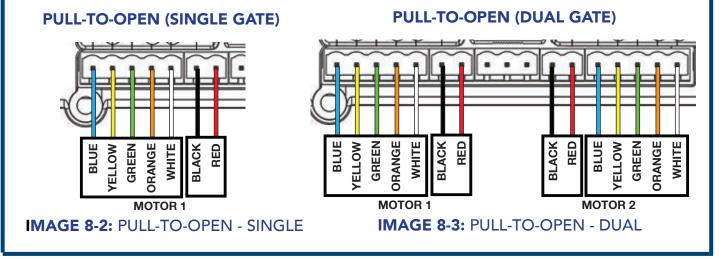
NOTE:

If a gate moves in opposite direction from what is expected, reverse the motor power lead wiring (red & black wires) for that motor.

In dual gate systems, the longer actuator cable is usually conneted to MOTOR 2.

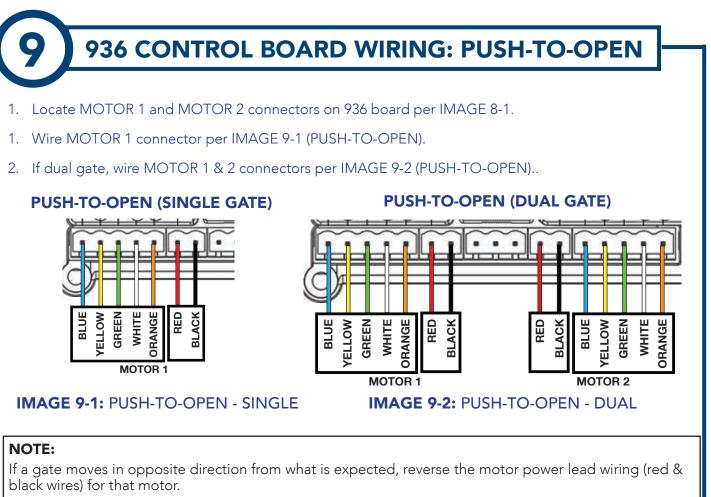
1. Locate MOTOR 1 and MOTOR 2 connectors on 936 board per IMAGE 8-1.

- 1. If single gate, wire MOTOR 1 connector per IMAGE 8-2 (PULL-TO-OPEN).
- 2. If dual gate, wire MOTOR 1 & 2 connectors per IMAGE 8-3 (PULL-TO-OPEN)..



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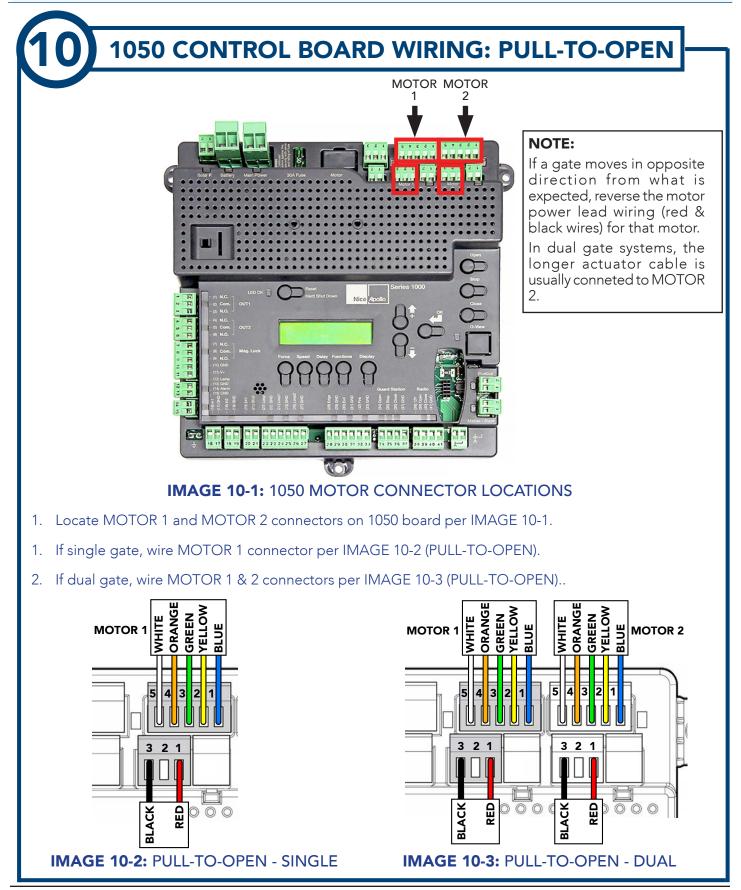
In dual gate systems, the longer actuator cable is usually conneted to MOTOR 2.





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5.2 WIRING ACTUATOR TO 1050 CONTROL BOARD



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1050 CONTROL BOARD WIRING: PUSH-TO-OPEN

- 1. Locate MOTOR 1 and MOTOR 2 connectors on 1050 board per IMAGE 10-1.
- 1. If single gate, wire MOTOR 1 connector per IMAGE 11-1 (PUSH-TO-OPEN).
- 2. If dual gate, wire MOTOR 1 & 2 connectors per IMAGE 11-2 (PUSH-TO-OPEN)..

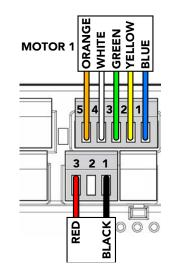
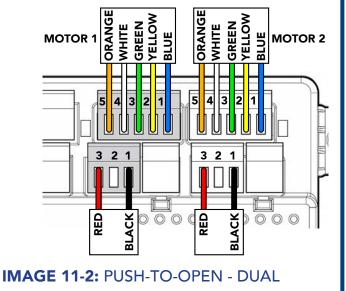


IMAGE 11-1: PUSH-TO-OPEN - SINGLE



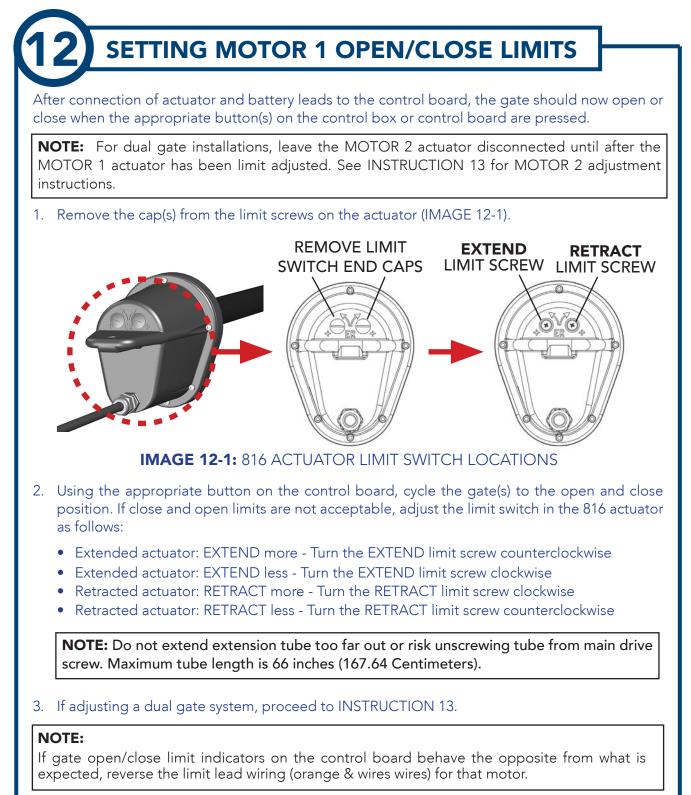
NOTE:

If gate open/close limit indicators on the control board behave the opposite from what is expected, reverse the limit lead wiring (orange & wires wires) for that motor.



5.3 SETTING OPEN/CLOSE LIMITS

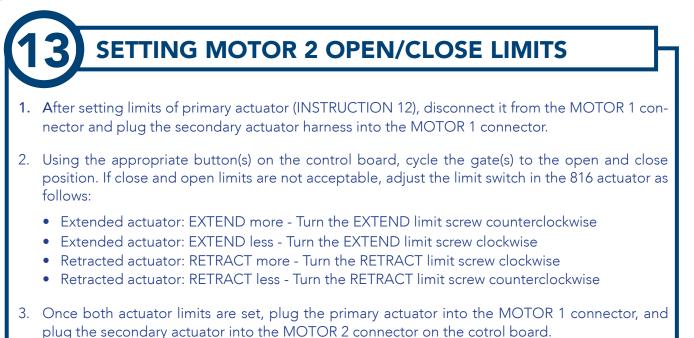
The 816 actuator features two limit screws for adjustment of the actuator open and close limits, and these function as described as follows in INSTRUCTIONS 12 and 13.







After following instructions in INSTRUCTION 12 for adjusting limits of the MOTOR 1 actuator, follow the steps below to set limits for the MOTOR 2 actuator.

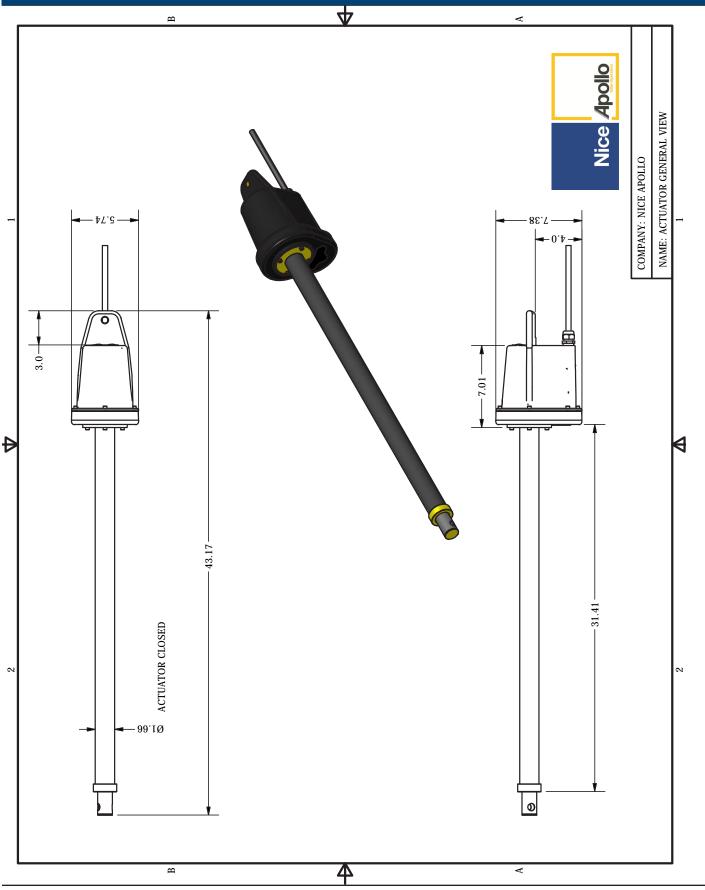


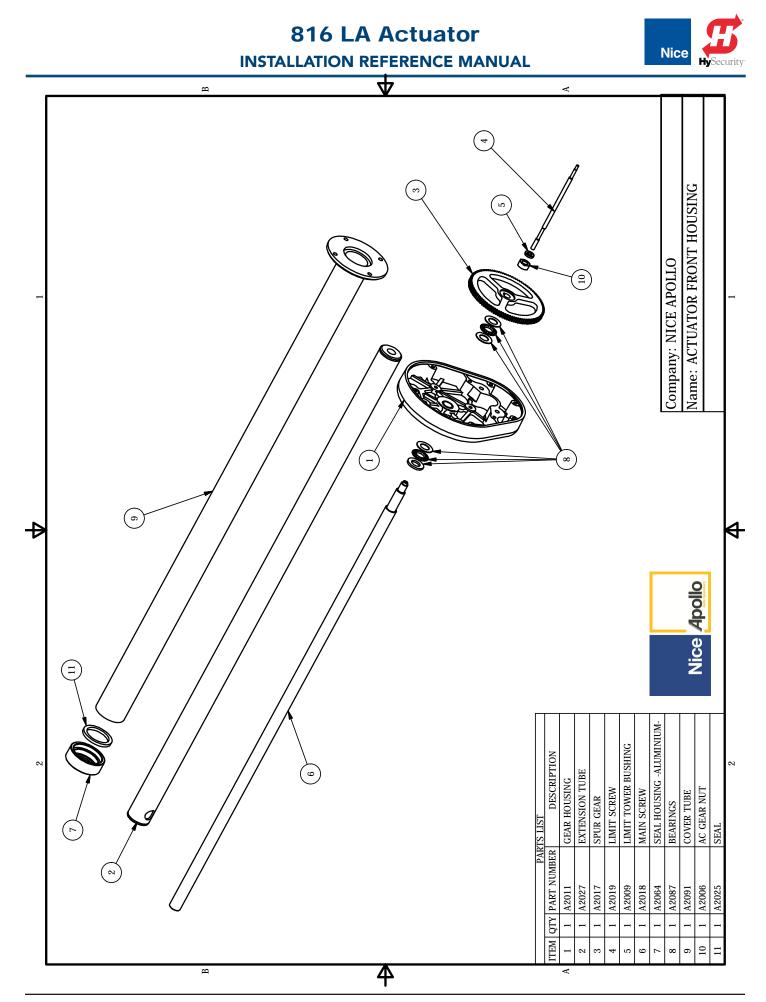
NOTE: Refer to the appropriate control box installation manual for programming and and accessory wiring connections.



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			J These I	



SECTION 7: WARRANTY

LIMITED WARRANTY—NICE-BRANDED PRODUCTS

1. Warranty.

Hy-Security Gate, Inc. ("HySecurity") warrants that at the time of sale, each Nice-branded gate operator product that it sells will, in all material respects, conform to the then applicable specification for the product and will be free from defects in material and manufacture.

The following additional durational warranties apply to products purchased through a distributor authorized by HySecurity to sell Nice products ("Authorized Distributor"), depending on whether (1) the product is purchased through an Authorized Distributor and (2) whether a timely and complete product registration is submitted to HySecurity.

It is therefore important that you register your product with HySecurity, online at www.hysecurity.com/warranty, within the 60-day period described below.

1(a) Nice-branded Products Purchased Through Authorized Distributors and Properly Registered

For any gate operator product that is purchased from an Authorized Distributor (this excludes product purchased through internet resellers or any distributor not authorized by HySecurity to sell Nice products), if the product registration is completed by the Dealer/Installer or End User within 60 days of the date of purchase, the following warranty terms will apply. HySecurity warrants that the product will remain serviceable for the following periods:

a) Electromechanical pad-mounted Slide and Swing operators: Three years after the date of installation,

b) Electromechanical linear actuator Swing operators: Three years after the date of installation,

c) Electromechanical barrier arm operators: Three years after the date of installation,

d) Nice-branded accessories: Three years after the date of installation, provided that the Three-Year warranty period in (a), (b), or (c) will not extend beyond four years from the date that the product was shipped from HySecurity.

The preceding warranty durations do not apply to the products or components described below (e-f), which have a shorter warranty period: e) Batteries: One Year from date of shipment from HySecurity.

f) Components subject to normal wear including, but not limited to, chains,

belts, idler wheels, sprockets and fuses: One Year from date of installation.

1(b) Nice Products Not Purchased Through an Authorized Distributor or Not Properly Registered within 60 Days

For any product that is not purchased from an Authorized Distributor or for which the product registration was not completed by the Dealer/Installer/End User within sixty (60) days of the date of purchase, the following **Two-Year Limited Warranty** will apply: HySecurity warrants that the product will remain serviceable for Two Years from the date that the product was shipped from HySecurity.

1(c) Replacement Parts

HySecurity warrants that replacement parts (whether new or reconditioned) will remain serviceable for One Year from the date that the part was shipped from HySecurity or the remaining period of the Gate Operator warranty, whichever is longer.

1(d) Limitations and Exclusions Applicable to Each of the Preceding Warranties.

The preceding warranties shall not apply to equipment that has been (1) installed, maintained, or used improperly or contrary to instructions; (2) subjected to negligence, accident, vandalism, or damaged by severe weather, wind, flood, fire, terrorism or war; or (3) damaged through improper operation, maintenance, storage or abnormal or extraordinary use or abuse. Any modification made to products will void the warranty unless the modifications are approved in writing by HySecurity in advance of the change (this exclusion does not apply to normal installation of approved accessories and/or protective devices or sensors). It is the responsibility of the Distributor, Dealer/Installer, or End User to ensure that the software version in the product is maintained to the latest revision level.

The preceding warranties do not extend to accessories when those items carry the name plate of a manufacturer other than HySecurity or Nice and they are not a part of the base model. HySecurity disclaims all warranties for such accessory components, which carry only the original warranty, if any, of their original manufacturer. HySecurity hereby assigns its rights under such manufacturer warranties—to the extent that such rights are assignable—to Buyer. These warranties extend to HySecurity's Distributors, to the Dealer/Installer, and to the first End User of the product following installation. They do not extend to subsequent purchasers. 2. Limitation of Certain Implied Warranties and Exclusion of Other Warranties.

The warranties contained in Section 1 are the exclusive express warranties given by HySecurity and supersede any previous, contrary or additional representations, whether oral or written. Any prior or extrinsic representations or agreements are discharged or nullified. ANY IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO PERIOD OF THE APPLICABLE EXPRESS WARRANTY FOR THE PRODUCT OR COMPONENT. HYSECURITY HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES—INCLUDING ANY LIABILITY FOR INFRINGEMENT, AND ANY WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

3. Buyer's Exclusive Remedies for Any Nonconformity.

If a Nice product fails to conform to the warranties in Section 1, Buyer must notify and order replacement parts from the Distributor through which the product was purchased within a reasonable time and in no event more than thirty (30) days after the discovery of the nonconformity. HySecurity will investigate and, in the event of a breach, will provide, within a reasonable period of time, one of the following: (1) repair or replacement of any nonconforming products or components or (2) refund of the price upon return of the nonconforming items. HySecurity reserves the right to supply used or reconditioned material for all warranty claims. Hysecurity will not be considered to be in breach of or default under this Warranty because of any failure to perform due to conditions beyond its reasonable control, including any force majeure. This warranty does not cover any incidental expenses, including fines or penalties, temporary security, labor, shipping, travel time or standby time that are incurred for inspection or replacement of any nonconforming items. As a condition of warranty coverage, warranty claims must be submitted in accordance with the procedures described on the HySecurity form, "RMA Procedures."

THE REMEDY SELECTED BY HYSECURITY IN ACCORDANCE WITH THIS PARAGRAPH SHALL BE THE **EXCLUSIVE AND SOLE REMEDY OF BUYER FOR ANY BREACH OF WARRANTY.**

4. Exclusion of Consequential and Incidental Damages.

HYSECURITY AND NICE SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE, OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT OR FROM HYSECURITY'S OR NICE'S OWN NEGLIGENCE. This exclusion applies regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability. This exclusion does not apply to claims for bodily injury or death.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

5. Severability.

If any provision of this warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect.

6. Proprietary Rights.

HySecurity and Nice retain and reserve all right, title, and interest in the intellectual property rights of their products, including any accompanying proprietary software. No ownership of any intellectual property rights in the products or accompanying so®ware is transferred to Distributor, Dealer/Installer, or End User.

7. Applicable Law.

This warranty will be interpreted, construed, and enforced in all respects in accordance with the laws of the State of Washington, without reference to its choice of law principles. The U.N. Convention on Contracts for the International Sale of Goods will not apply to this warranty

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

Nice Branded Product Warranty D0920 Revised 101519

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DOCUMENT REVISIONS			
NAME	DESCRPTION OF CHANGE	DATE	
Curtis Harvey	Rev B: Removed anodized gate bracket	09/13/2019	
Curtis Harvey	Rev-C: replaced warranty, added new cover, and corrected gate bracket image.	10/23/2019	

INSTALLATION INFORMATION AND SIGN-OFFS

Installation Acceptance

Address where opener is located

Installer name, number and address

End user name and telephone number