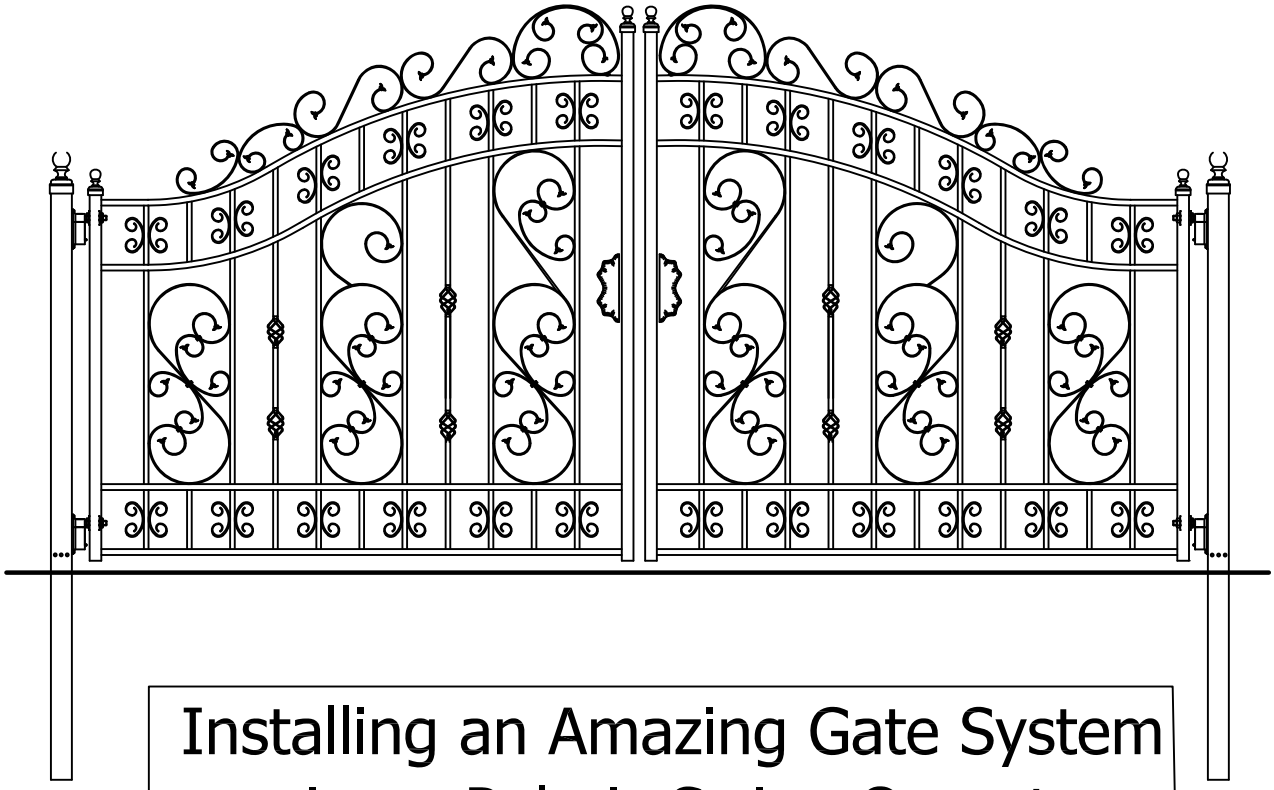
PLEASE!! READ THESE INSTRUCTIONS! EACH SEPARATE CONTROL YOU BOUGHT HAS ITS OWN INSTRUCTIONS BUT WE RECOMMEND YOU USE THESE FIRST.



Installing an Amazing Gate System using a Polaris Swing Operator

FROM THE ORIGINATORS OF THE
PRE-HUNG AUTOMATIC GATE SYSTEM

AMAZING GATES OF AMERICA L.L.C.
608 TIERRA MONTANA LOOP
BERNALILLO, NEW MEXICO 87004
505-771-8777
WWW.AMAZINGGATES.COM

08-22-06

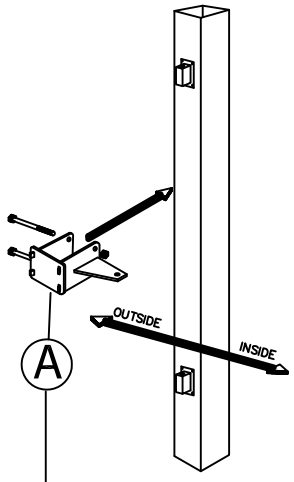
Installing the Polaris 500 & 700 Swing Operators

PULL TO OPEN GATES

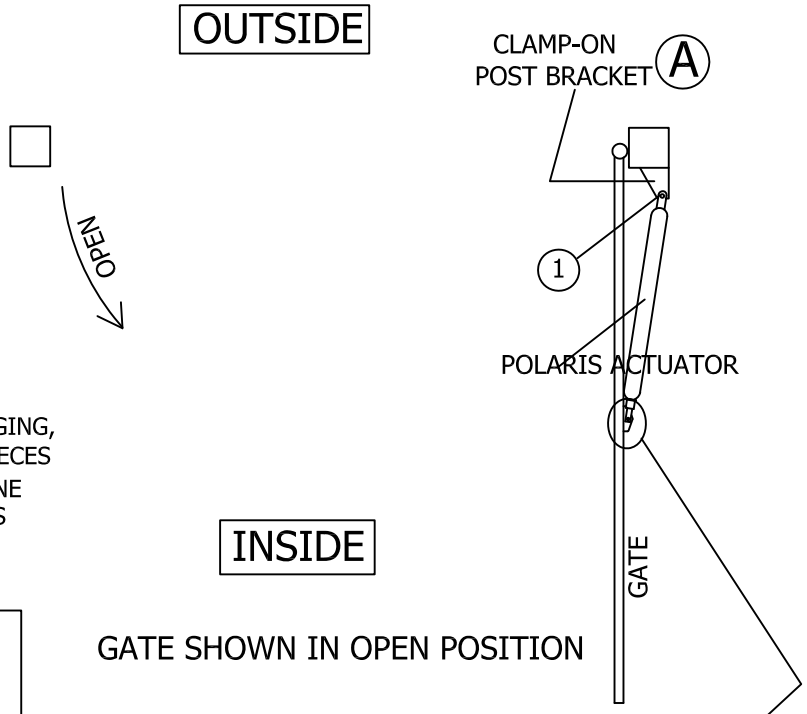
GATE SWINGS INWARD, OPERATOR IS ON INSIDE. WHEN THE GATE IS FULLY OPEN, THE OPERATOR IS RETRACTED.

MOUNTING THE POST BRACKET

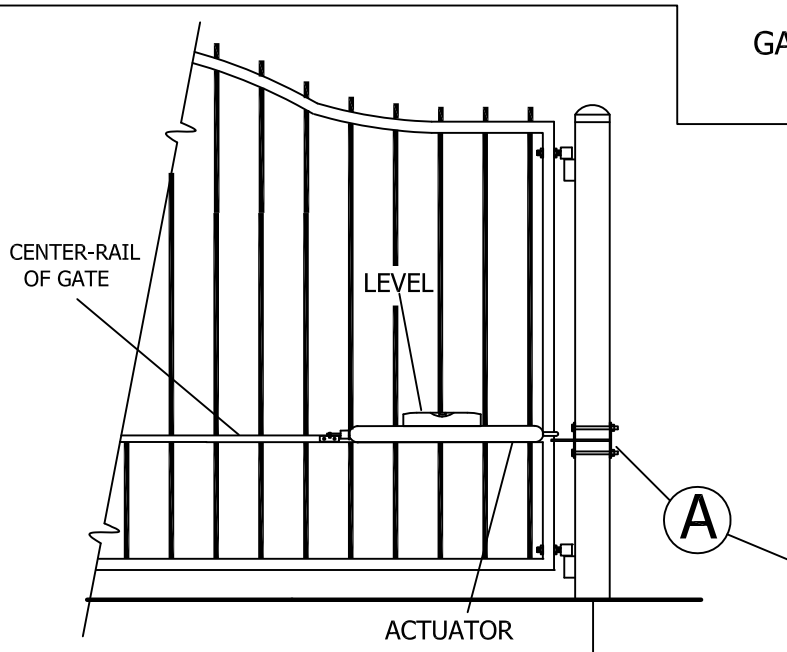
BEGIN WITH THE GATE FASTENED IN THE OPEN POSITION. POSITION THE POLARIS ACTUATOR AS IT COMES OUT OF THE BOX ie. FULLY RETRACTED. ALL THE BOLTS AND CLEVIS PINS AND THE ACTUATOR END-BRACKET COME IN THE POLARIS BOX IN A PLASTIC BAG. (1.) USING A CLEVIS PIN AND A WHITE NYLON CYLINDRICAL WASHER, FASTEN THE REAR OF THE ACTUATOR ONTO THE CLAMP-ON POST BRACKET. (2.) USING A CLEVIS PIN, ATTACH THE ACTUATOR END-BRACKET TO THE END OF THE ACTUATOR. (3.) USING SUPPLIED, PLATED CARRIAGE BOLTS, AND MAKING SURE THE GATE IS STILL IN THE OPEN POSITION, FASTEN END-BRACKET TO THE CENTER-RAIL THRU THE SLOTTED HOLES. WE RECOMMEND BOLTING TO THE CENTER OF EACH SLOTTED HOLE AS SHOWN BELOW. THIS IS USEFUL FOR SMALL ADJUSTMENTS LATER.



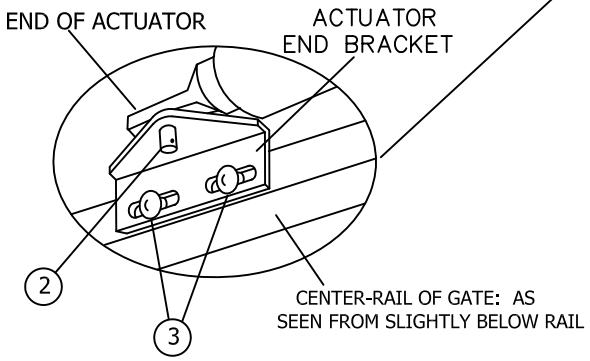
THE CLAMP-ON POST BRACKET (A) COMES IN ITS OWN PACKAGING, NOT IN THE POLARIS CARTON. IT IS COMPRISED OF THREE PIECES THAT ARE POWDER COATED BLACK PLUS TWO ½" X 5" MACHINE BOLTS/NUTS. THIS BRACKET ENCLOSES THE POST ON 3 SIDES (SEE DRAWING BELOW). CLAMP ON AND TIGHTEN LIGHTLY ACCORDING TO DRAWINGS BELOW.



GATE SHOWN IN OPEN POSITION



GATE SHOWN IN OPEN POSITION



CENTER THE POST BRACKET (A) APPROXIMATELY IN LINE WITH THE CENTER-RAIL. TIGHTEN BOLTS ENOUGH TO KEEP THE BRACKET FROM SLIDING DOWN THE POST. ONCE THE ACTUATOR IS FASTENED TO THE CENTER-RAIL, LEVEL THE ACTUATOR WITH A TORPEDO LEVEL AND TIGHTEN THE NUTS ON THE CLAMP-ON POST BRACKET COMPLETELY.

INSIDE OUTSIDE

POLARIS 500-700 PULL TO OPEN

Installing the Polaris 500 & 700 Swing Operators

PUSH TO OPEN GATES

GATE SWINGS OUTWARD, OPERATOR IS ON INSIDE. WHEN THE GATE IS FULLY CLOSED, THE OPERATOR IS RETRACTED.

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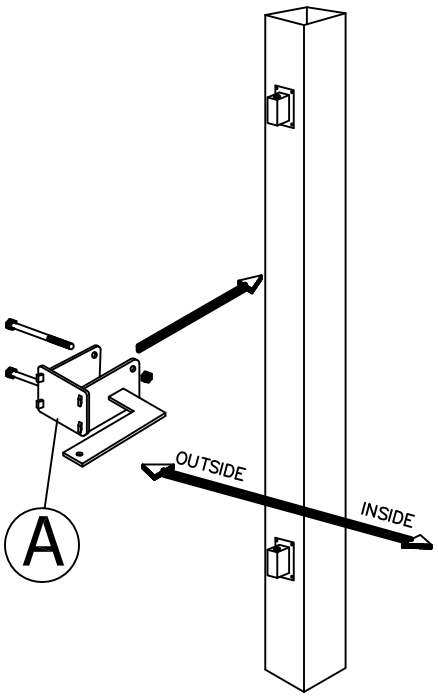
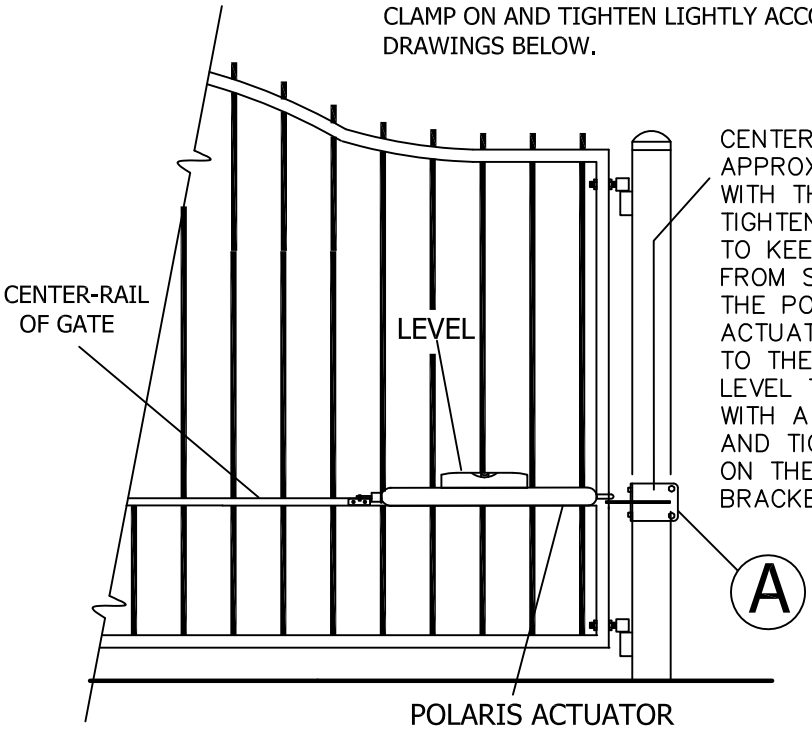
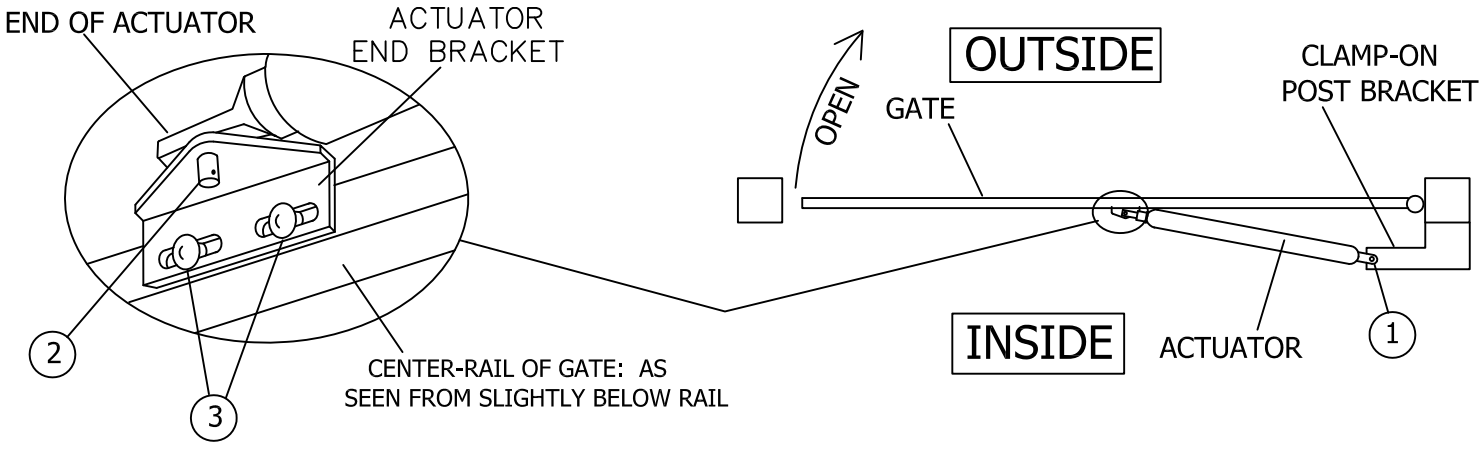
THE CLAMP-ON POST BRACKET (A) COMES IN ITS OWN BOX, NOT IN THE POLARIS CARTON. IT IS COMPRISED OF THREE PIECES THAT ARE POWDER COATED BLACK PLUS TWO ½" X 5" MACHINE BOLTS/NUTS. THIS BRACKET ENCLOSES THE POST ON 3 SIDES (SEE DRAWING BELOW). CLAMP ON AND TIGHTEN LIGHTLY ACCORDING TO DRAWINGS BELOW.





CENTER THE BRACKET (A) APPROXIMATELY IN LINE WITH THE CENTER–RAIL. TIGHTEN BOLTS ENOUGH TO KEEP THE BRACKET FROM SLIDING DOWN THE POST. ONCE THE ACTUATOR IS FASTENED TO THE CENTER–RAIL, LEVEL THE ACTUATOR WITH A TORPEDO LEVEL AND TIGHTEN THE NUTS ON THE CLAMP–ON POST BRACKET COMPLETELY.



BEGIN WITH THE GATE FASTENED IN THE CLOSED POSITION. POSITION THE POLARIS ACTUATOR AS IT COMES OUT OF THE BOX ie. FULLY RETRACTED. ALL THE BOLTS AND CLEVIS PINS AND THE ACTUATOR END-BRACKET COME IN THE POLARIS BOX IN A PLASTIC BAG 1. USING A CLEVIS PIN AND A WHITE NYLON CYLINDRICAL WASHER, FASTEN THE REAR OF THE ACTUATOR ONTO THE CLAMP-ON POST (B) BRACKET. 2. USING A CLEVIS PIN, ATTACH THE ACTUATOR END-BRACKET TO THE END OF THE (C) ACTUATOR. 3. USING SUPPLIED, PLATED CARRIAGE BOLTS, AND MAKING SURE THE GATE IS STILL IN THE CLOSED POSITION, FASTEN END–BRACKET TO THE CENTER–RAIL THRU THE SLOTTED HOLES. WE RECOMMEND BOLTING TO THE CENTER OF EACH SLOTTED HOLE AS SHOWN ABOVE. THIS IS USEFUL FOR SMALL ADJUSTMENTS LATER.

POLARIS 500 and 700 PUSH TO OPEN

Installing the Polaris 500 & 700 Swing Operators

WARNINGS----------

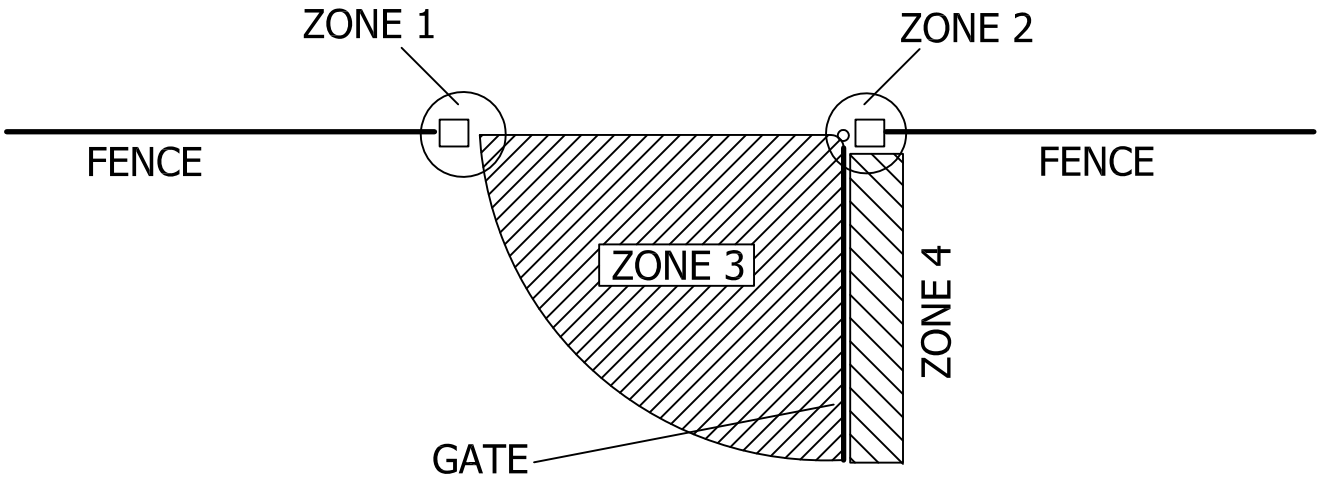
1. READ AND FOLLOW ALL INSTRUCTIONS.
2. NEVER let children operate the gate or play with the controls.
3. Keep the remote controls out of chidrens' reach.
4. Keep people and objects away from the gate and its immediate area, both open and closed.
5. After the limit adjustments are made, all auto reversing controls including the current sensing circuit built into the Polaris must be checked. They must be working and set to the proper sensitivity. Failure to adjust and retest the gate system increases the chance of injury or death.
6. Test the system MONTHLY. Check to make sure that all auto-reversing devices including the current sensing circuit built in to the Polaris are working and set to the proper sensitivity.
7. Verify that the emergency (manual) release pin here the Polaris connects to the gate leaf can be easily removed. This check should only be made with the battery disconnected to prevent the gate from moving during the test.
8. This is a VEHICLE GATE ONLY. Pedestrians must use a separate entrance.
9. NEVER install any control device on the outside of the Polaris cabinet or in such a way that someone can reach through the gate to activate it.l
10. SAVE THESE INSTRUCTIONS!

CAUTIONS----------

1. NEVER operate the gate unless you can see it.
2. Do not enter the gate area while the gate is in motion.
3. Do not allow children near the gate and don not allow anyone to ride on the gate.
4. Do not attempt to drive through the gate opening while the gate is still in motion.

ENTRAPMENT ZONES----------

Zone 1- Leading edge of the gate and catch-post
Zone 2- Area between gate and hinge post
Zone 3- The gate path or "arc of the swing"
Zone 4- The area between the gate in its' open condition and any obstruction like a fence, building, landscaping feature etc.
Zone 5- Not shown above but similar to zone 1- the point where two bi-parting gate leaves meet when closed.

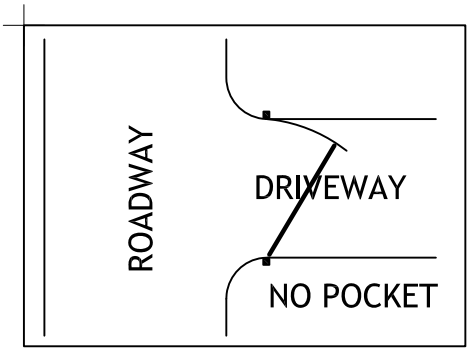


LAYING OUT YOUR AMAZING GATE

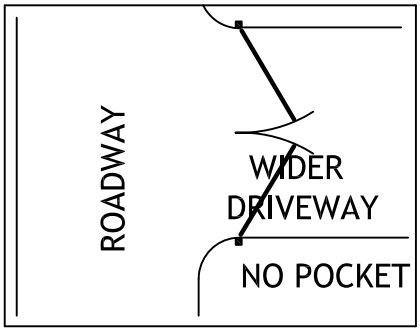
Determine the gate location and lay it out on the ground. White spray paint or white flour work well and some stakes and a string line are helpful. Basic pricipals include: THE POCKET, ie. the gate's distance from the turn into your driveway, SQUARENESS, ie. the gate's angle to the drive path, INSWING/OUTSWING, and HANDING, ie. which side of the gate has the hinges?

Below are drawings showing some layout scenarios. Sometimes space limitations may force you to use a less desirable layout.

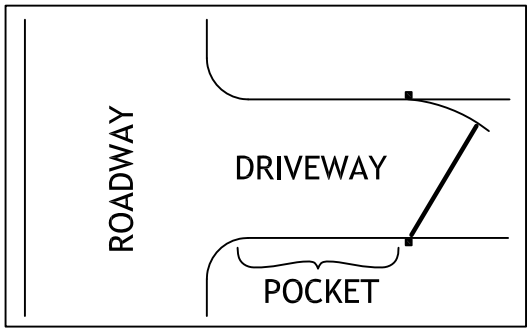
THE POCKET



WORST CASE- PREVENTS YOU FROM PULLING OFF ROAD AS YOU WAIT FOR THE GATE. PREVENTS LARGER VEHICLES FROM MAKING THE TURN IN



IMPROVED CASE- DOESN'T ALLOW A POCKET BUT ALLOWS LARGER VEHICLES (A MOVING VAN ETC.) TO MAKE THE TURN INTO THE DRIVEWAY

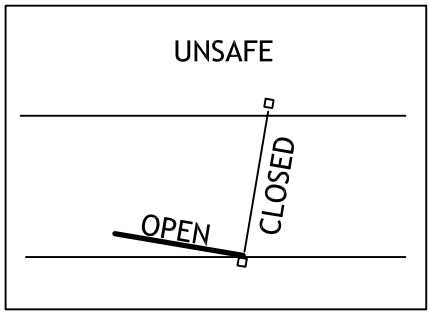


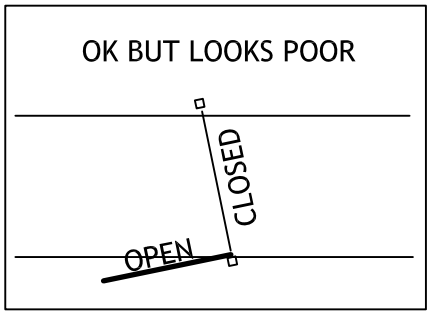
BEST CASE- LETS YOU COMPLETE THE TURN AND PULL OFF ROAD WHILE YOU WAIT FOR GATE TO OPEN

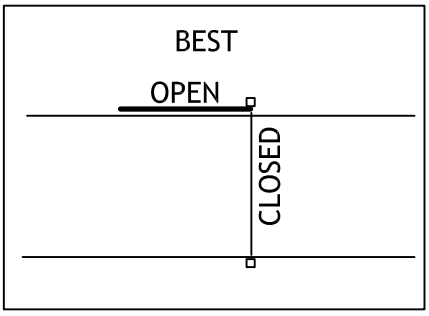
1. It is most desirable to have a slight "pocket" in front of your gate. If the gate must be right up against your road, a wider opening should be considered.

SQUARENESS

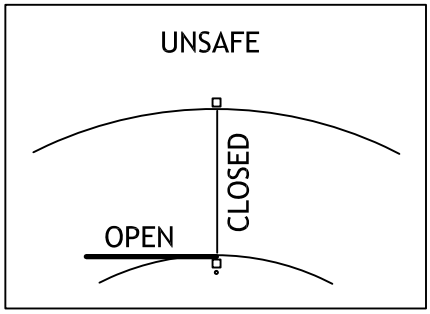
1. Since most automatic gates open only slightly more than ninety degrees, it is important to make the gate perpendicular to your drive path.

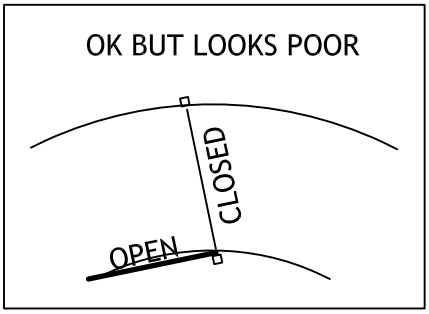


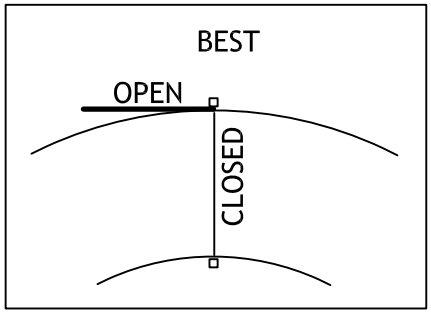




1. Curved driveways demand extra care in layout. No one wants their gate hit by a vehicle.



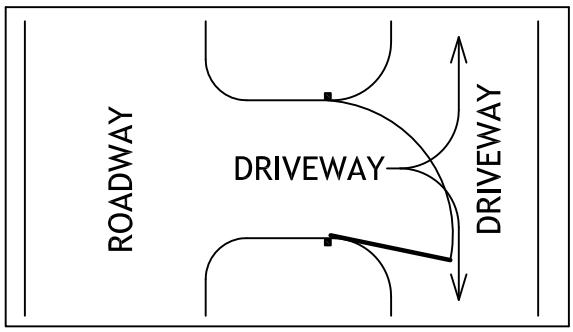




LAYING OUT YOUR AMAZING GATE

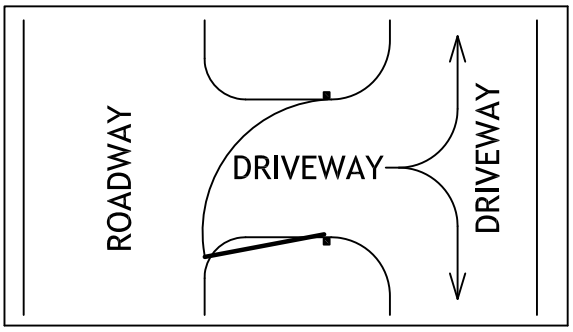
INSWING/OUTSWING

1. The most desirable configuration for a swinging gate is to swing inward. However, certain driveway conditions can make it necessary to swing a gate outward.

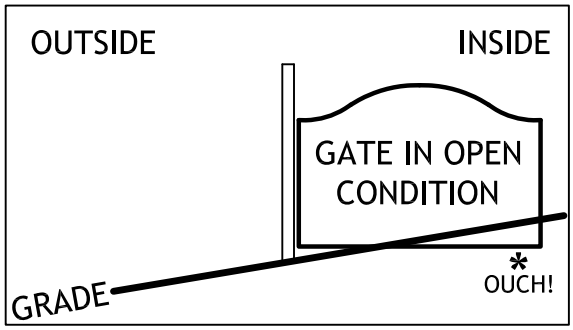


PROBLEM (AT LEFT)
WHEN OPEN, IN-SWING ING GATE PROTRUDES INTO DRIVE SPACE

SOLUTION (RIGHT)
CHANGE GATE TO AN OUT-SWING

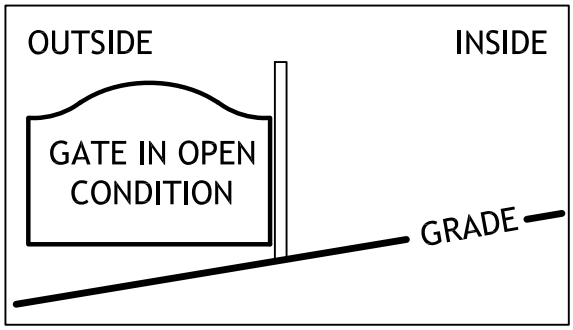


2. Another condition that may force you to swing your gate outward is an upward sloping driveway.



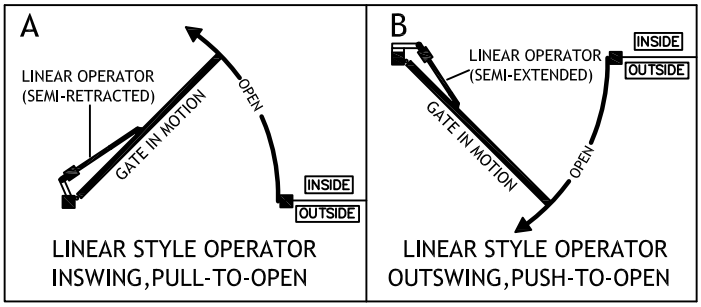
PROBLEM (AT LEFT)
WHEN IN-SWINGING GATE OPENS, IT HITS GROUND. YOU CAN HANG GATE HIGHER ON THE POST BUT MORE THAN 6"-8" ABOVE GRADE LOOKS BAD.

SOLUTION (RIGHT)
GATE INSTALLED AS AN OUT-SWING, PLENTY OF GROUND CLEARANCE

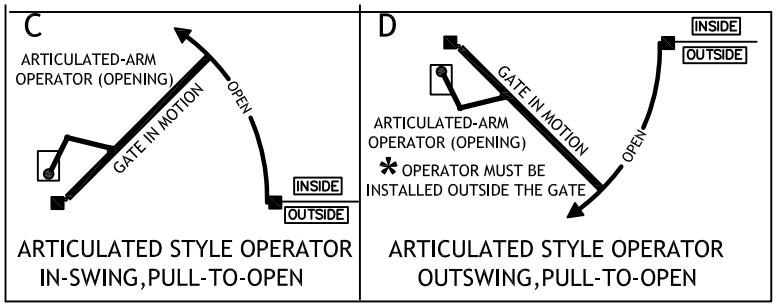


3. A linear operator (GTO, Patriot or Miracle I) can be set up as "pull-to-open" (drawing A below) or as "push-to-open" (drawing B below) ie. gate swings outward and the operator stays inside.

4. An articulated-arm operator (Elite CSW 200 or DoorKing 6100) can be set up to open inward (drawing C below) or to open outward (drawing D below) but the operator must go outside the gate.



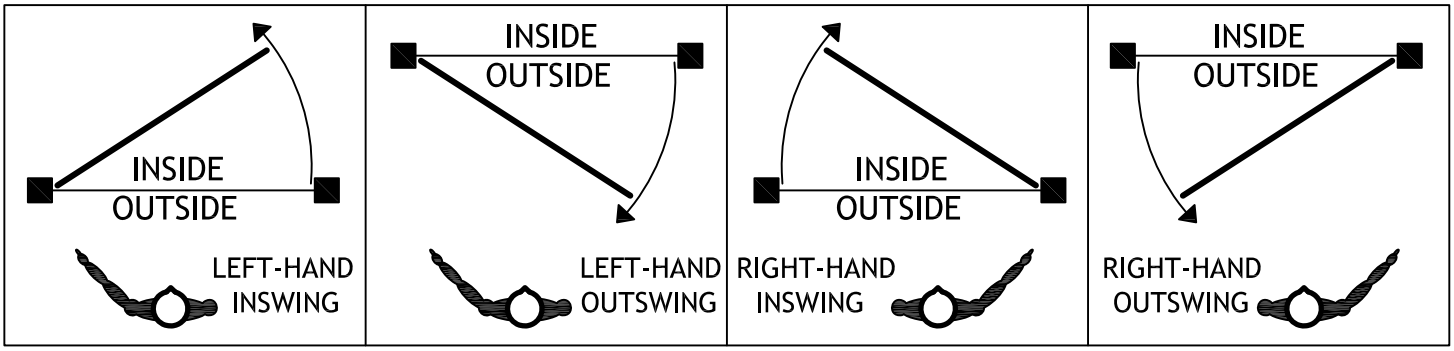
GTO's PATRIOTS AND ELITE MIRACLES



ELITE CSW AND DOOR KING 6100

"HANDING" YOUR GATE

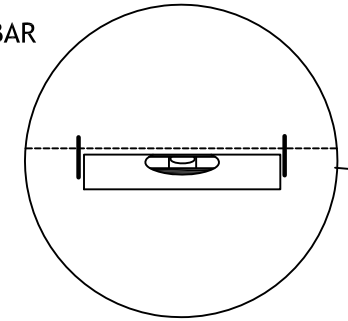
Imagine standing OUTSIDE your gate, then ask yourself "are the hinges on the right or the left?" See the four examples below.



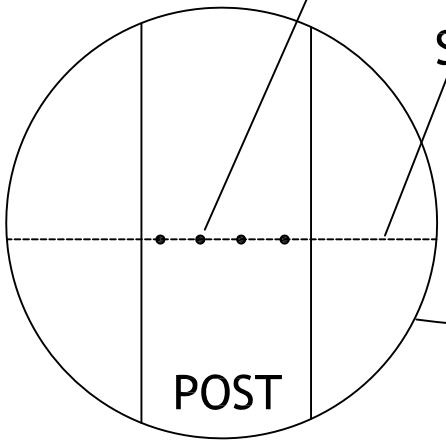
DRIVE GATES — SETTING THE POSTS

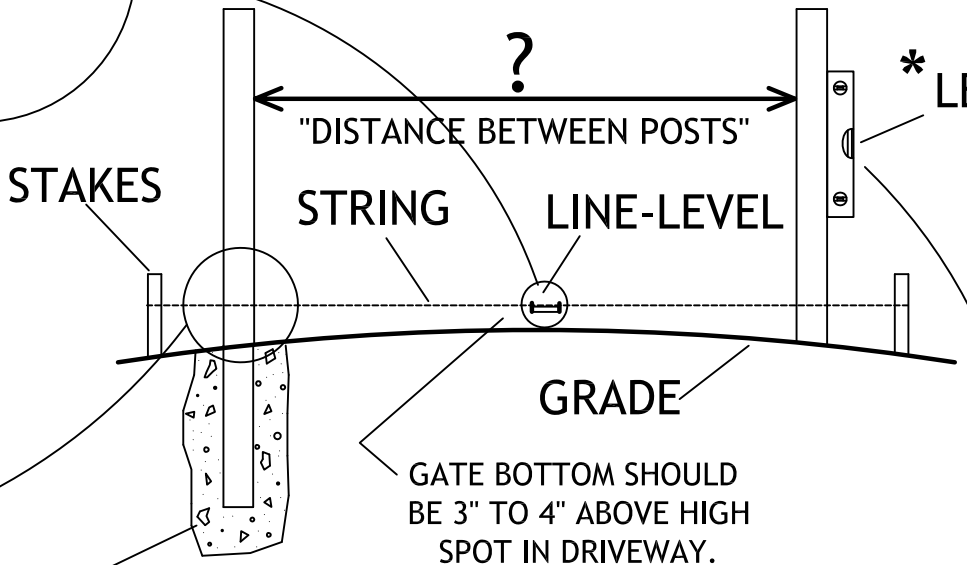
1 YOU WILL NEED:
1. STRING LINE AND LINE LEVEL
2. SHOVEL/POST HOLE DIGGERS/DIGGING BAR
3. TAPE MEASURE AND A LEVEL
4. HAMMER AND STAKES
5. WHEELBARROW
6. PRE-MIXED CONCRETE
(APPROX. 8-10 60 LB. OR 6-8 80 LB. SACKS)

2 USE A LINE-LEVEL ON THE STRING. SET THE STRING WHERE YOU WANT THE BOTTOM OF THE GATE WHEN IT IS CLOSED.



3 ALIGN THE ROW OF DIMPLES ON THE POST WITH THE LEVEL STRING

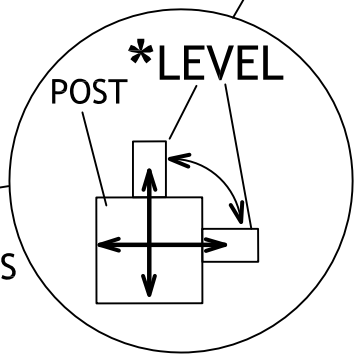




? "DISTANCE BETWEEN POSTS" IS THE NOMINAL WIDTH OF YOUR GATE, I.E. IF YOU BOUGHT A 16 FOOT GATE, SET THE POSTS EXACTLY 16 FEET APART, 12 FOOT GATE, 12 FEET APART ETC.

4 SET THE POSTS IN CONCRETE, HOLE DIAMETER SHOULD BE AT APPROX.16". DO NOT MAKE HOLE PERFECTLY ROUND. MIX CONCRETE STIFF SO THE POST WILL STAND UNAIDED UNTIL CONCRETE SETS (24 HOURS).

5 USE THE LEVEL TO PLUMB THE POSTS IN BOTH DIRECTIONS



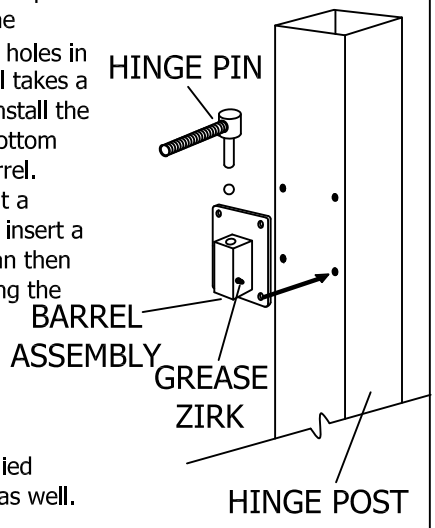
HANGING THE GATE

We will illustrate a single swing gate. A dual or bi-parting simply has a second hinge post in lieu of a strike post

BESIDES THE EQUIPMENT WE SHIPPED TO YOU, YOU WILL NEED: 1. 2 crescent wrenches 2. screwdrivers 3. a level 4. Some all-weather grease 5. A helper

1 PREP HINGES

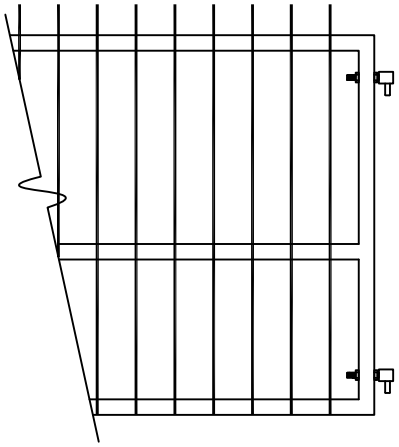
Using the supplied machine screws bolt the hinge barrel assemblies to the posts. The other half of each hinge, the hinge-pin, bolts through the ¾" holes in the gate itself Each hinge-barrel takes a ball bearing and a hinge-pin. Install the supplied grease zirks into the bottom threaded hole in each hinge barrel. Using an all-weather grease, put a dollop on each ball bearing and insert a bearing into each barrel. You can then use the zirk fitting for re-greasing the hinge as needed.



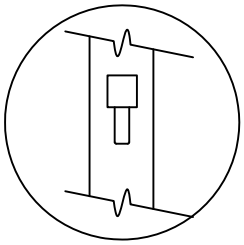
***Be sure and insert the supplied set-screw into the hinge barrel as well.

2 PREP HINGE-PINS

Next, put the threaded portion of the hinge-pins through the holes in the gate frame, tighten lightly with a wrench, making sure the unthreaded portion points down and is parallel to the gate frame.



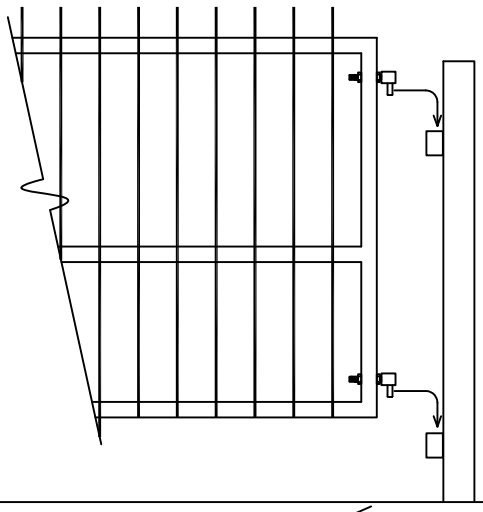
SIDE VIEW



HINGE DETAIL END VIEW

3 HANG THE GATE

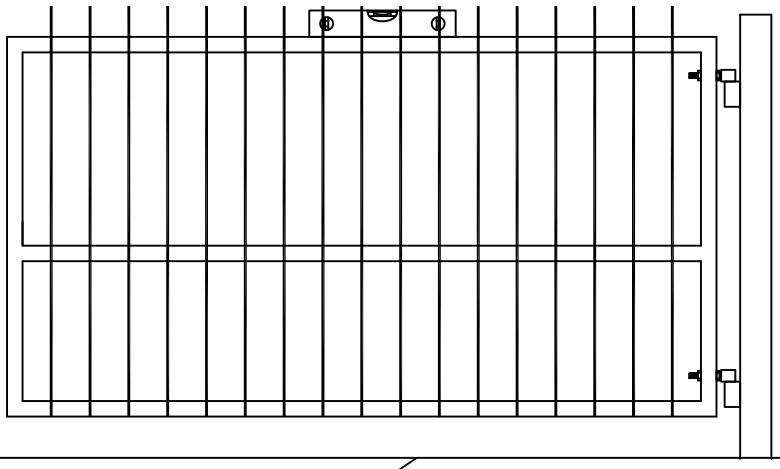
Using a helper, lift the gate and gently slide it toward and down onto the hinge barrels. This may take two or three attempts since both hinge-pins must enter the barrels simultaneously.



DRIVE SURFACE

4 LEVEL AND TIGHTEN

Finally, using your level and the crescent wrenches, adjust the top and bottom hinge-pins with the nuts until the gate hangs exactly level. Check the swing, it should be smooth and quiet. Tighten the hinge-nuts completely.



DRIVE SURFACE

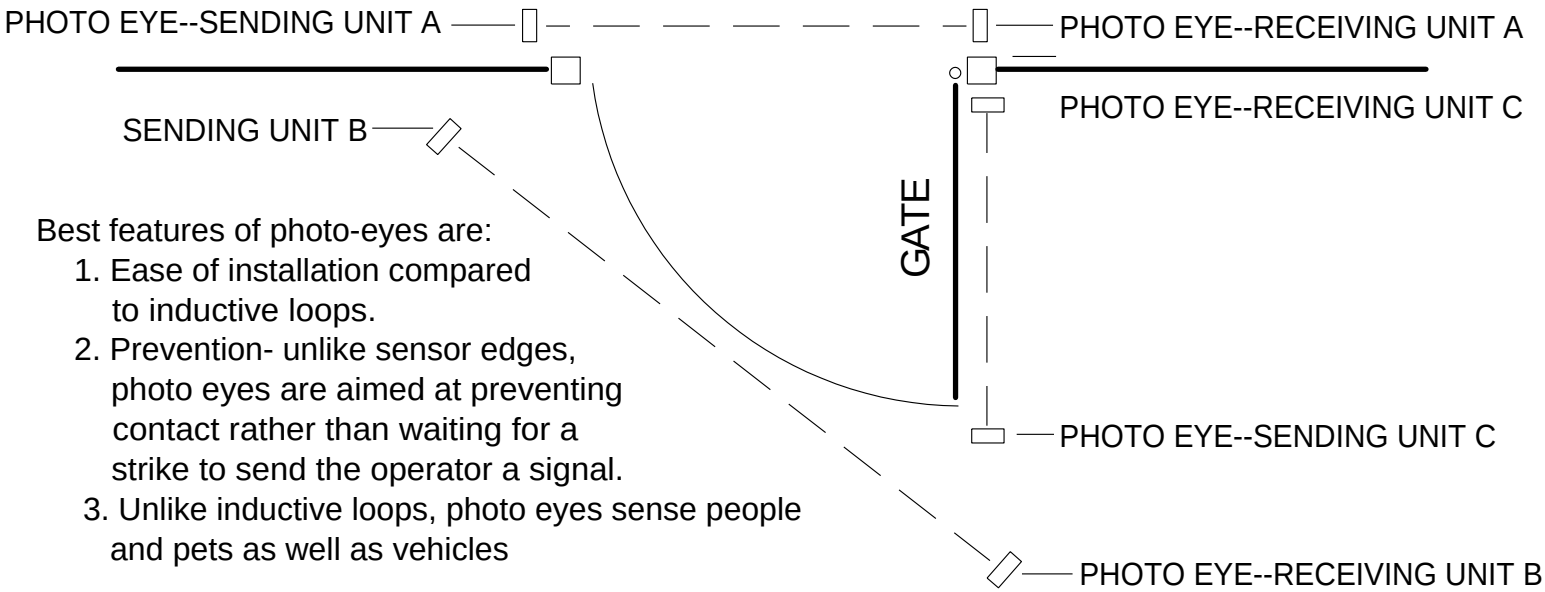
INSTALLING THE AGA 500-700

ENTRAPMENT REMEDIES----------

PHOTO EYES

Amazing Gates strongly recommends the use, AT LEAST, of two sets of photo eye controls (A and B below) to prevent the gate from closing on a person, pet, vehicle or inanimate object. Photo eyes A and B are only active when the gate is standing open or during the closing cycle. When the beam of either set is broken, the gate will not close, or if it is already closing it will stop and reopen. Photo eyes labeled "C" are recommended if you have an entrapment issue when gate is fully open. "C" should be wired to stop the gate during the OPEN cycle. Photo eyes come in pairs, there is a sending unit and a receiving/controller unit.

THE CONFIGURATION SHOWN BELOW IS OUR RECOMMENDATION



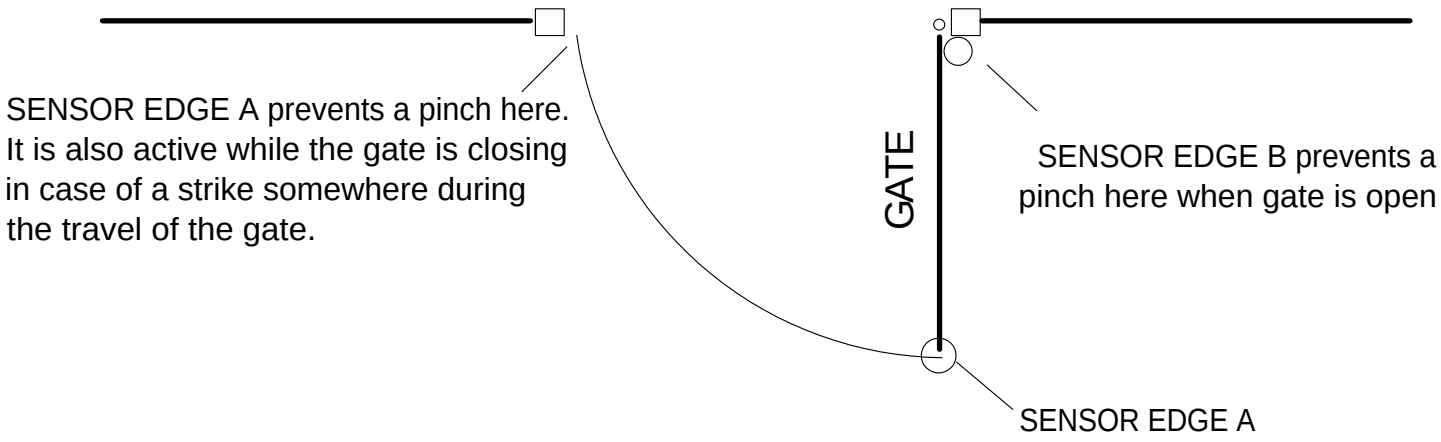
Best features of photo-eyes are:

1. Ease of installation compared to inductive loops.
2. Prevention- unlike sensor edges, photo eyes are aimed at preventing contact rather than waiting for a strike to send the operator a signal.
3. Unlike inductive loops, photo eyes sense people and pets as well as vehicles

SENSOR EDGES

Amazing Gates also recommends the use of sensor edges wherever pinch points are anticipated. The most common spot for a sensor is on the leading edge of the gate so there is no pinch point at the catch post when the gate closes comletely.

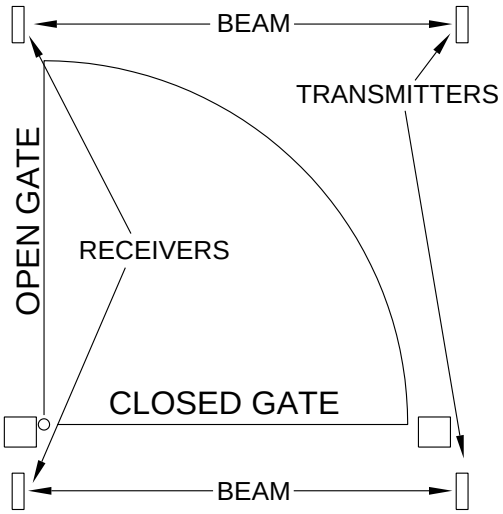
THE CONFIGURATION SHOWN BELOW IS OUR RECOMMENDATION



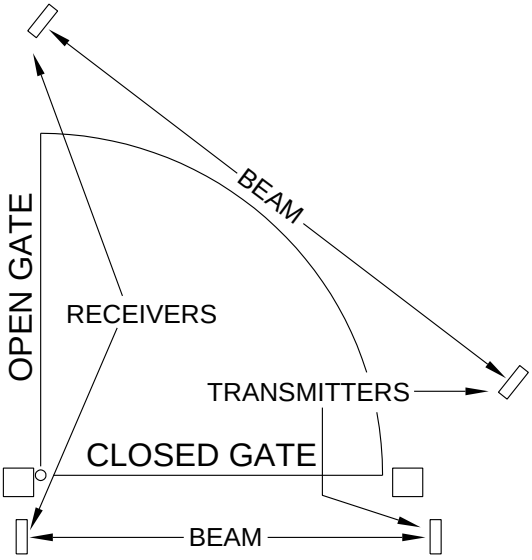
It is recommended at this point that you examine the instruction manual by Rutland for this Gate Operator. This manual comes in the GTO carton.

IR-3000G PHOTO EYE

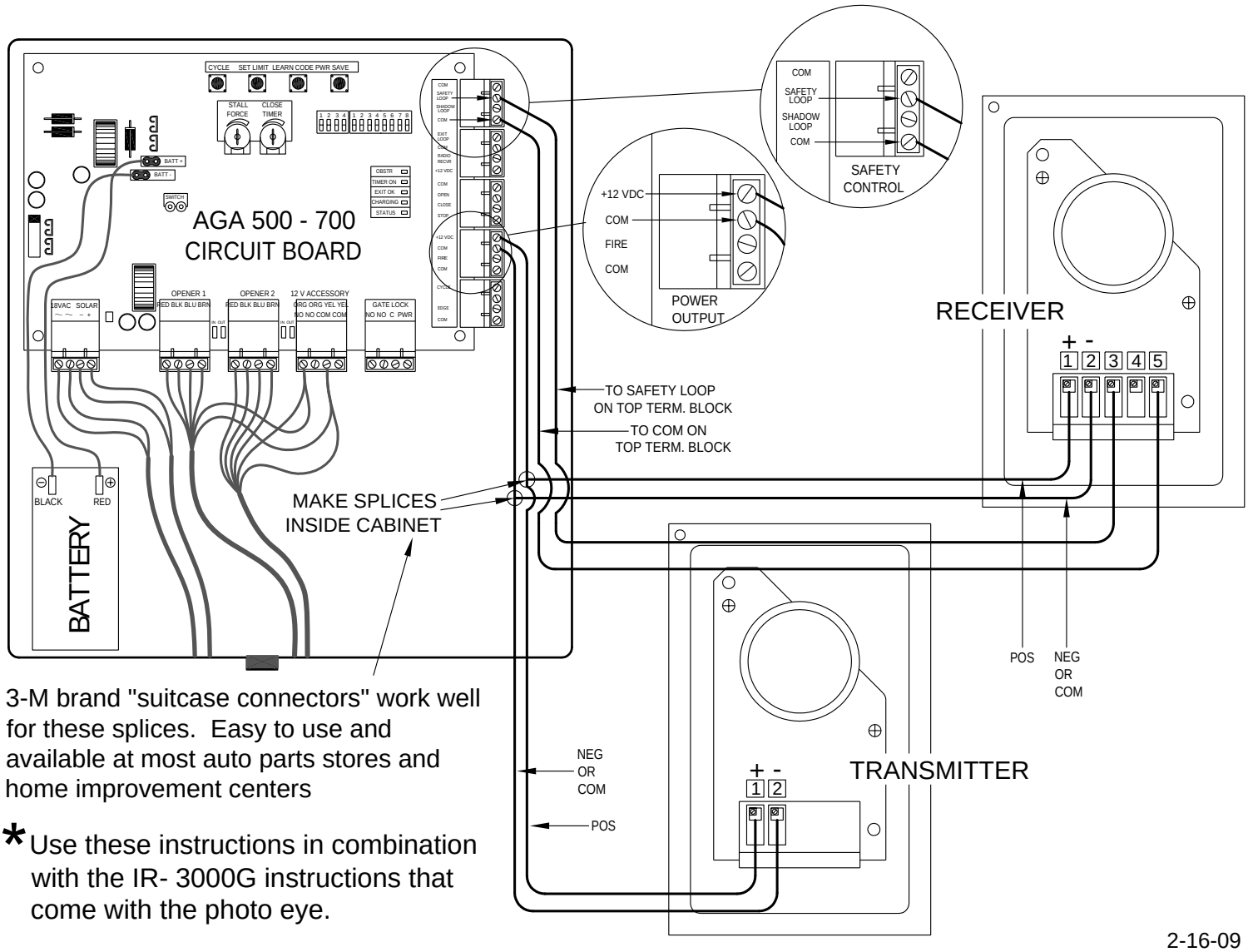
PAIRED WITH AGA GATE OPERATORS



Here are two configurations for using two sets of photo- eyes as "auto-reversing" controls. 3' to 4' landscaping timbers make good mounting posts. Set the photo-eyes about 16" above grade. To test, disconnect wires 3 & 5 in RECEIVER unit, make sure units are powered and aligned then break the beam. You should hear a small click in the RECEIVER module. After re-connecting 3 & 5 to gate operator, test again.



The IR-3000G photo-eye has two parts: the TRANSMITTER and the RECEIVER. The TRANSMITTER has 2 screw terminals labeled plus and minus. The RECEIVER has 5 terminals, DO NOT use terminal no. 4. To connect the units to the gate operator circuit board see the drawing below. Use a direct-burial control wire like "sprinkler wire" available at most home improvement stores.



3-M brand "suitcase connectors" work well for these splices. Easy to use and available at most auto parts stores and home improvement centers

* Use these instructions in combination with the IR- 3000G instructions that come with the photo eye.

2-16-09

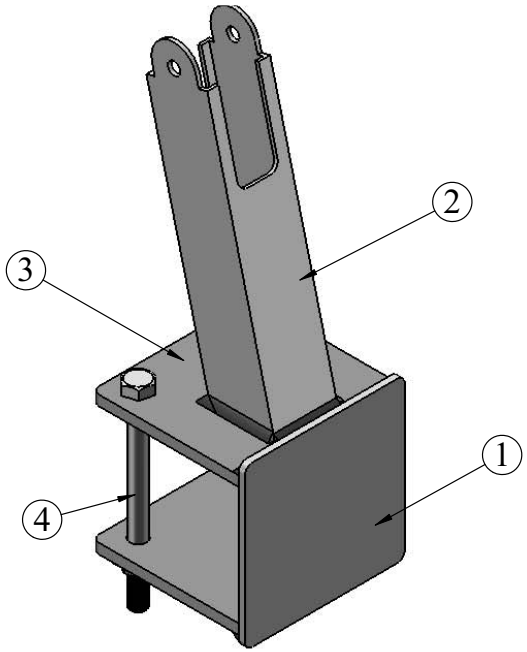
AMAZING GATES

POST MOUNT BRACKET

PULL ARM

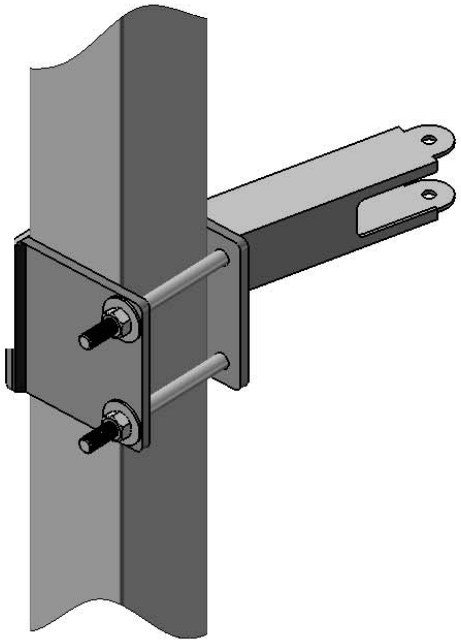
With the purchase of a **Full Gate System** (Gate, post & swing operator) you will receive the Amazing Gates pre-assembled pull or push arm, if this is the case ***you will not use*** the hardware brackets that automatically come inside the operator box for mounting the operator to the posts.

The Amazing gates post attachment arm does not require drilling of the post to be installed. You simply set into position and bolt it tight. The angle in pre set.



Remember:

If you have the **Full Gate System** (Gate, post & swing operator) you will not use the hardware brackets that automatically come inside the operator.



DETAIL INSTALL WITH POST

Amazing Gates	**AMAZING GATES OF AMERICA LLC.**		**Approved by:**	**Date:**
Title: AGA PULL ARM - TO SUIT 3.5"x3.5" POST	**Work oder No.:** C04-...	**No.:** ...	**Material:** Steel Grade 250(CT3)	
Desc.: ASSEMBLY	**Quantity No.:** ...		**Finish:** HDG	
Drawing No. (Prod. Code): AGAPA_3.5"x3.5" POST	**Issued Date:** 2/26/2009		**NOTE:** All dimensions in mm (unless noted otherwise)	Sheet 1 of 1

AMAZING GATES

POST MOUNT BRACKET

PUSH ARM

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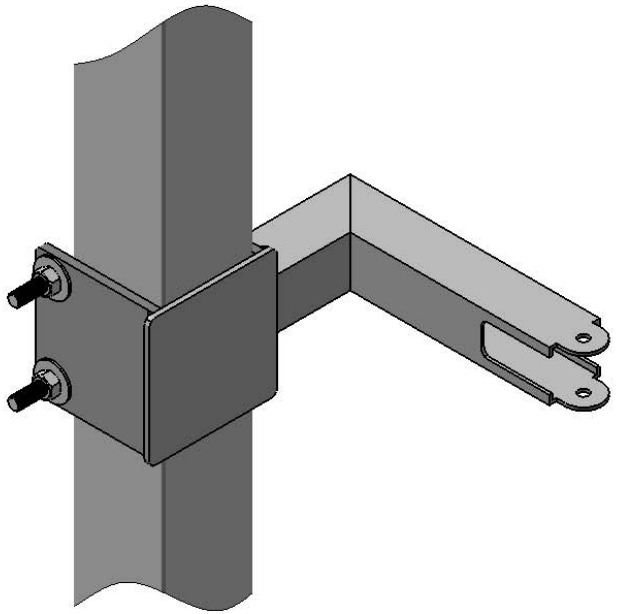
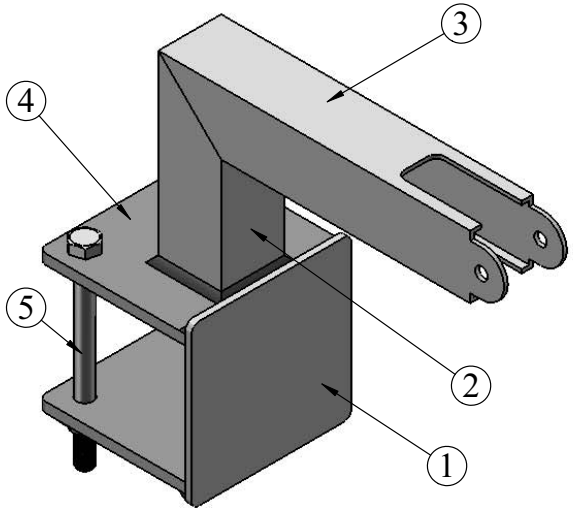


DETAIL INSTALL WITH POST



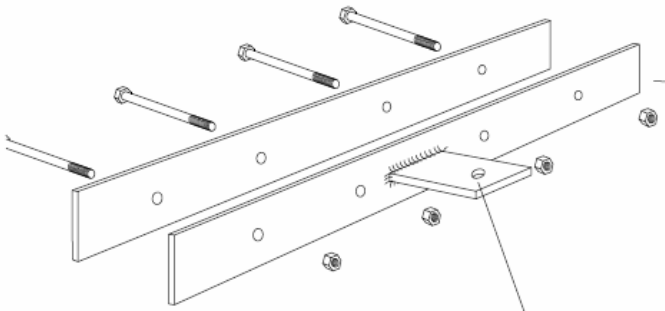
Remember:

If you have the **Full Gate System** (Gate, post & swing operator) you will not use the hardware brackets that automatically come with the operator.

AMAZING GATES OF AMERICA LLC.

Approved by:	**Date:**		
Title: AGA PUSH ARM - TO SUIT 3.5"x3.5" POST	**Work oder No.:** C04-...	**No.:** ...	**Material:** Steel Grade 250(CT3)
Desc.: ASSEMBLY	**Quantity No.:** ...		**Finish:** HDG
Drawing No. (Prod. Code): AGAPA_3.5"x3.5" POST	**Issued Date:** 2/26/2009		**NOTE:** All dimensions in mm (unless noted otherwise) — Sheet 1 of 1

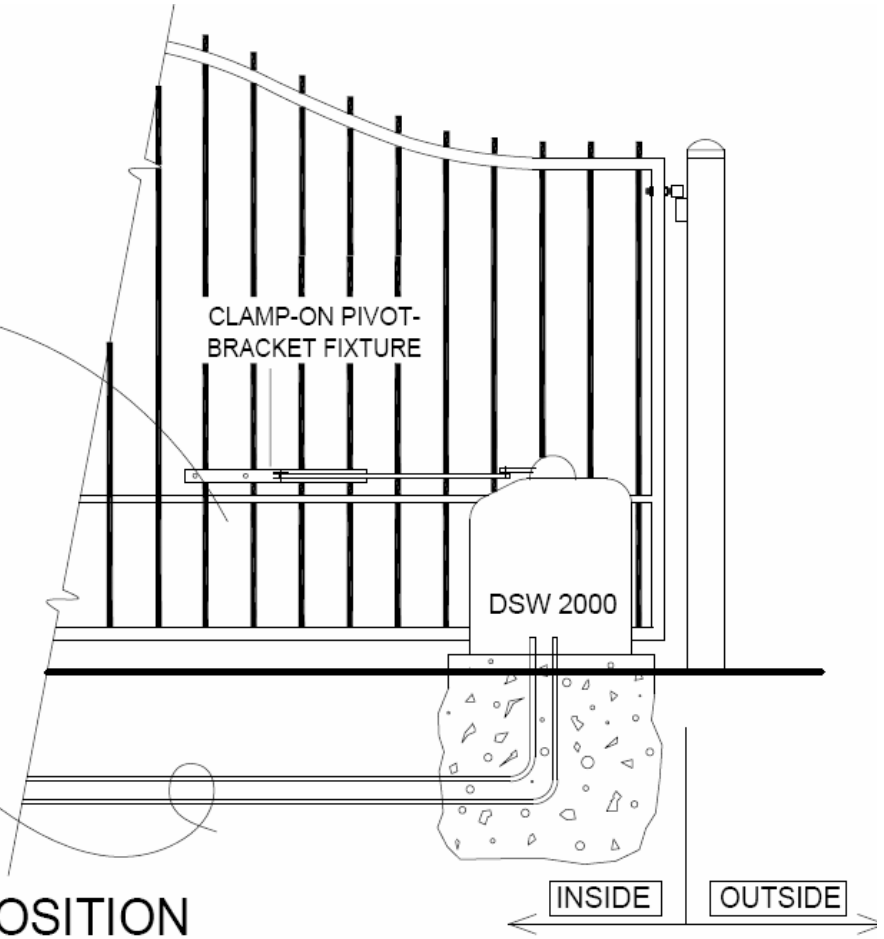
CLAMP-ON PIVOT-
BRACKET FIXTURE



END OF ARTICULATED
ARM FASTENS HERE

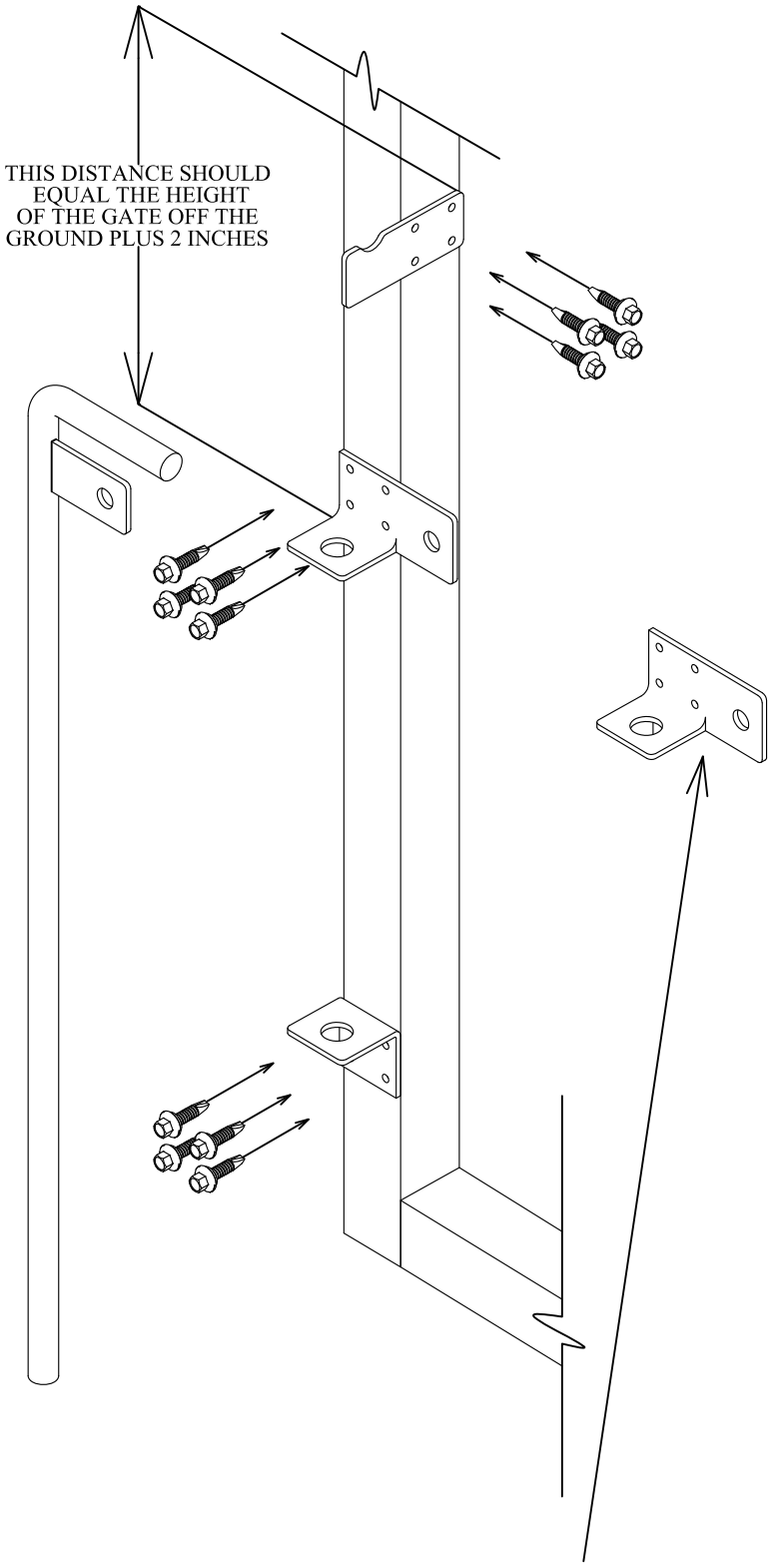
* TWO ¾" PVC CONDUITS
INTO VIKING CABINET

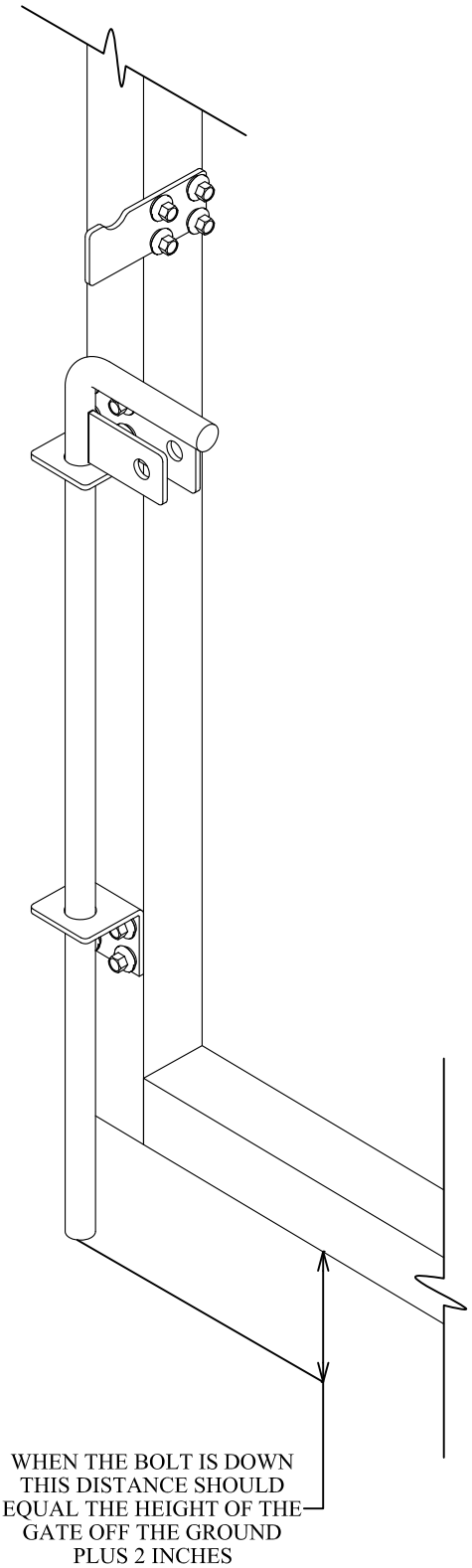
* IF USING A DUAL (MASTER/SLAVE) SYSTEM-
RUN A THIRD CONDUIT ACROSS DRIVEWAY
TO THE SECOND (SLAVE) GATE OPERATOR



GATE SHOWN IN OPEN POSITION

AMAZING GATES LOCKING CANE BOLT





* NOTE: THIS CANE BOLT COMES WITH A SECOND TOP BRACKET THAT ALLOWS INSTALLATION ON A GATE THAT IS HINGED IN THE OPPOSITE DIRECTION

Amazing Gates of America

Instructions for attaching finials

Encircle inside the base of the finial (spear, ball or flat cap) with a continuous bead of silicone. **Note:** Only a small amount of silicone is needed. Excess may form at the base when fitted over the picket. The excess can be removed by wiping with a damp cloth.
The finials should fit snug over the pickets. If a finial does not readily fit over the picket, drive the finial on using a rubber mallet. ***CAUTION*** the finials are made of aluminum; therefore make sure to use only a light amount of force. If you continue to have problems fitting the finial onto the picket, lightly sand down the powder coat finish at the top of the picket. Continue to lightly sand until the finial fits.

If these methods do not resolve the problem, please contact our Customer Service Department at: 800-234-3952.