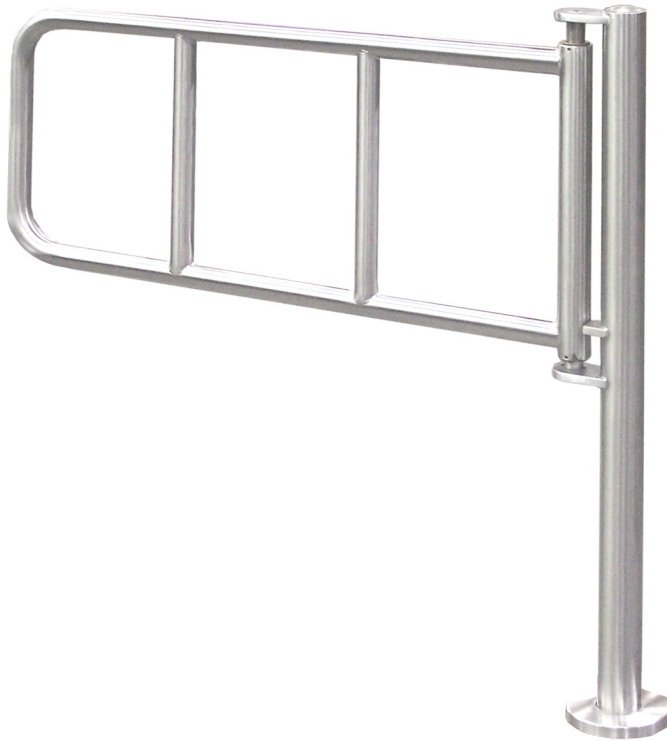


**SSG  
WAIST HIGH SECURITY GATE  
( SINGLE DIRECTION GATE )**



**INSTRUCTIONS AND  
MAINTENANCE GUIDE**  
Revision 3.0 – June 20, 2007

**Alvarado Manufacturing Company, Inc.**  
12660 Colony Street, Chino, CA 91710 (800) 423-4143 (909) 591-8431  
Fax: (909) 628-1403  
[www.alvaradomfg.com](http://www.alvaradomfg.com)

**ALVARADO**



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## IMPORTANT SAFETY PRECAUTIONS

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**WARNING: Always follow the installation and operating precautions, including the instructions below.**

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- Read this manual in its entirety before installing or operating the gate. If there are questions, you may contact Alvarado at (909) 591-8431, Monday through Friday, 6:00 AM to 4:30 PM PST.
- Use only skilled individuals to install and service the gate.
- The gate is not a toy. Do not allow children to play on or near the gate.
- Do not allow horseplay near the gate.
- Follow a proper maintenance schedule using skilled individuals.
- Do not operate the gate if it has been damaged in any manner. Have the gate repaired or adjusted by a skilled service person before use.
- Do not modify or alter the gate.
- Do not use non-Alvarado parts.

**SAVE THESE PRECAUTIONS**

## SSG GATE CONFIGURATIONS

### Description

For description purposes only, the gate can be described in **reference to the hinge location** when entering the gate. A Left Handed Gate swings with the hinge on the left when entering the gate. A Right Handed Gate swings with the hinge on the right when entering the gate. See details shown below:

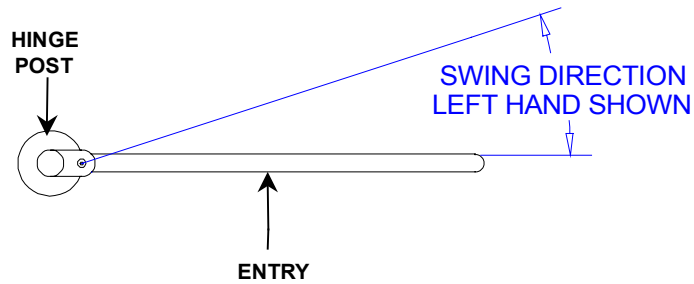


FIGURE 4.1.1 – Left Handed Gate

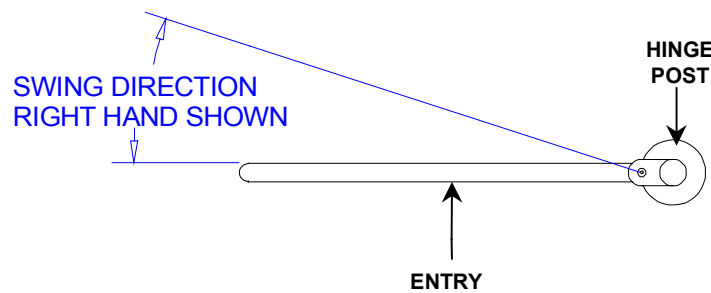


FIGURE 4.1.2 – Right Handed Gate

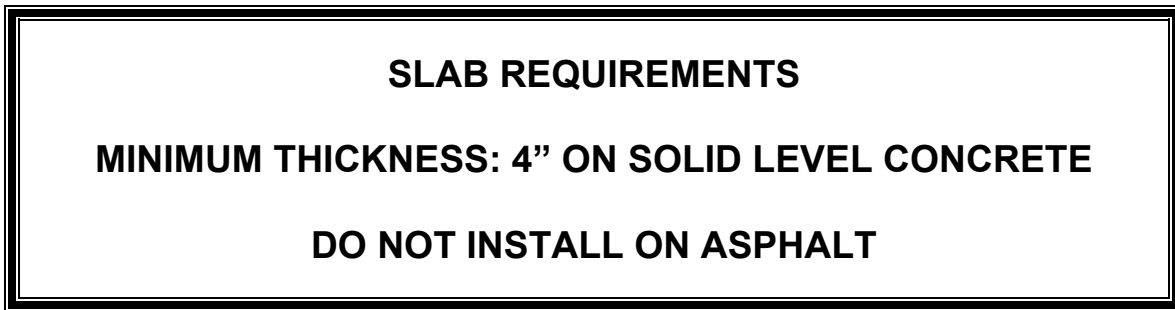
## COMPONENTS INCLUDED WITH ORDER

The following components are included with the order:

<b><u>SSG Gate Components:</u></b>	<b><u>Optional Components:</u></b>
<ol style="list-style-type: none"> <li>1. Hinge Post with Gate Arm</li> <li>2. This Manual</li> <li>3. Split Base Cover Package</li> </ol>	<ol style="list-style-type: none"> <li>1. Anchor Package                             <ul style="list-style-type: none"> <li>Qty 4 Each – 3/8 Anchors (2" length)</li> <li>Qty 4 Each – 3/8 –16 x 2½" HHCS</li> <li>Qty 4 Each – 3/8 Flat Washers</li> </ul> </li> </ol>

## OVERVIEW OF INSTALLATION

### Slab Requirements



### Overview of Installation Steps

- A. Determine gate location.
- B. Anchor gate post.
- C. Adjust gate for proper alignment.
- D. Test the gate.

### Tools Required

- Heavy Duty Drill or Roto Hammer
- 5/8” Concrete Drill Bit
- Ratchet with 9/16” Socket
- Torque Wrench
- 7/32” Allen Wrench
- Shop VAC
- Tape Measure
- Torpedo Level
- Chalk Line
- Safety Glasses
- Rubber Mallet

## LAYOUT & INSTALLATION

### Installation of the Gate Posts

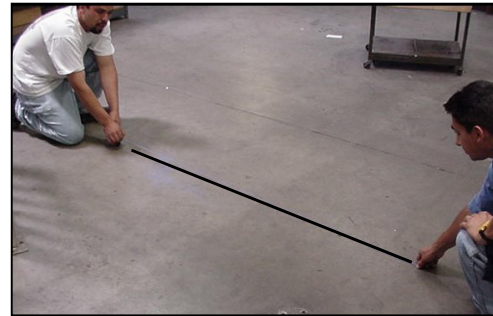
1. Determine the location where the gate will be installed taking into consideration the minimum width opening required (See the “SSG Plan & Elevation View” drawings for the minimum installation requirements). Once the installation location has been determined, snap a chalk line on the floor to mark the centerline of the gate. The chalked centerline should be at least 4 feet in length (See Figure 7.1.1).
2. Mark the locations (perpendicular to the gate centerline) for the hinge post centerline (See Figure 7.1.2).
3. Center the hinge post at the intersection of the gate and hinge post centerline (See Figure 7.1.2).
4. With the gate arm in it's neutral position (home position), ensure that the entire unit: hinge post and gate arm are parallel to the gate centerline (See Figure 7.1.2).
5. Mark the center locations of the four anchor holes for the post. Move the post to the side and drill a 5/8” diameter hole at the center of each marked location. Drill each hole 3” deep. For terrazzo, ceramic tile, or brick veneer installations, add the thickness of the finished floor material to the anchor hole depth.

**NOTE:** See the Figure 7.1.3 for details.

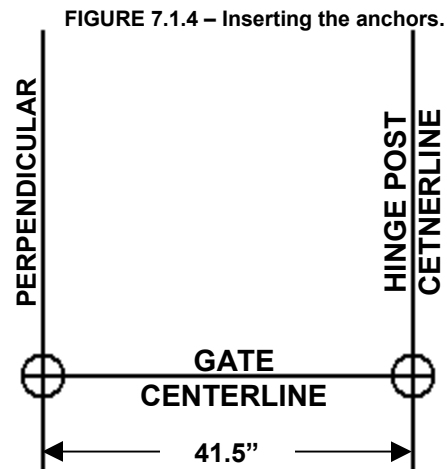
6. Vacuum out the holes thoroughly. If the holes are not clean, the anchors will not tighten.
7. Insert one anchor into each drilled hole. Ensure that the anchors are flush with the concrete floor. (See Figure 7.1.4).

**NOTE:** Insert the anchors with the threads down.

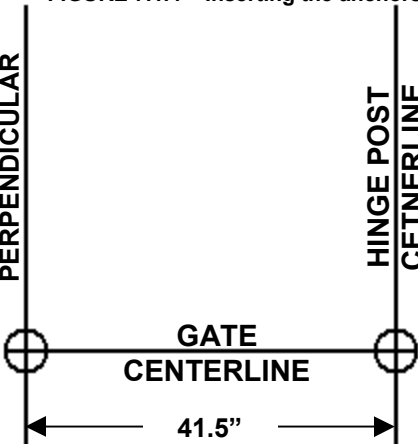
8. Place the hinge post back over the anchor holes. Anchor the post with four (4) each 3/8 - 16 x 2 1/2” HHCS bolts and flat washers. Make sure that the installation is level. Do not tighten the bolts all the.
9. Adjust and shim the post as required to properly align the gate. **It is important that the posts be horizontally and vertically level with the floor for the gate arm to self-close and center properly.**



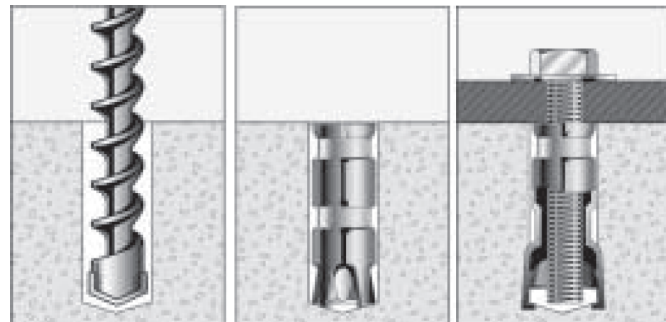
**FIGURE 7.1.1**  
Locate the Gate Centerline.  
Mark the Gate Centerline.



**FIGURE 7.1.4 – Inserting the anchors.**



**FIGURE 7.1.2**  
Locating the hinge post centerline.



Drill hole.  
Clean Hole.

Vacuum and remove debris. Insert the Anchors with the thread side down. Ensure the anchors are flush with the surface.

Insert the bolt and tighten.

**FIGURE 7.1.3**

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**NOTE:** For safety and operation of the turnstile, it's extremely important that the hinge post and gate arm be level. Use a level to verify that the hinge post and gate arm is level horizontally with the floor and vertically level with each other.

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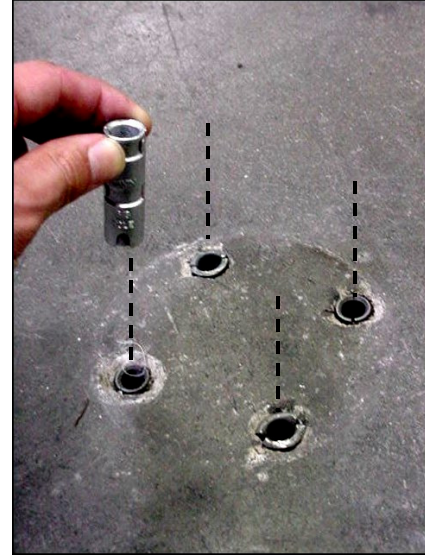
10. Tighten all of the anchoring bolts (4 bolts total) to **25 ft-lbs**.
11. Install the (2) halves of the split base cover around the hinge post base plate and secure it by tapping it lightly with a rubber mallet.

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**NOTE:**

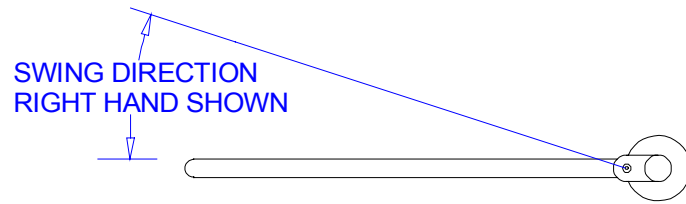
- Ensure that all anchoring bolts are tighten to 25 ft-lbs.
- Ensure the hinge post and gate arm is vertically and horizontally level.
- Ensure the gate arm and hinge post is at a 90-degree angle.

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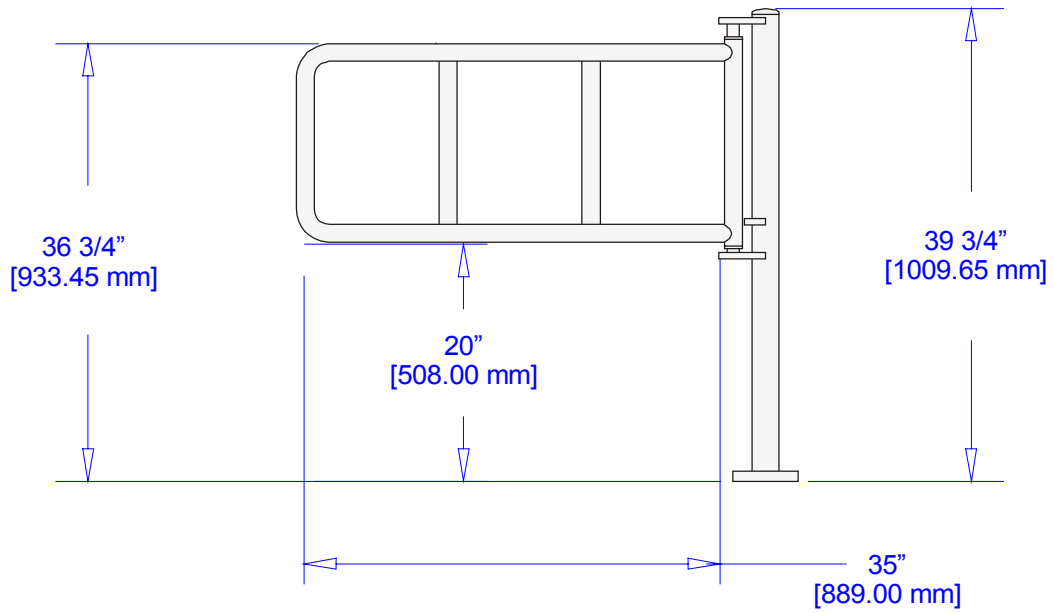




## SSG GATE PLAN & ELEVATION VIEW



**PLAN VIEW**



**ELEVATION VIEW**

## MAINTENANCE

Inspect the installed gates approximately 1 to 2 weeks after the initial installation. Inspect the installed gates again after 60 days. Thereafter, the frequency of maintenance will depend on usage and the environment. We suggest inspecting the gate at least once a year minimum. Maintenance should be performed more frequently in high use applications and/or in dusty or humid environments. Periodically check the anchor bolts for tightness. Exterior cleaning should be performed as necessary.

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**NOTE:** Setting up a maintenance schedule along with proper maintenance will ensure maximum performance and long service life of the gate. In addition, proper cleaning is required to achieve maximum corrosion resistance and aesthetic appeal.

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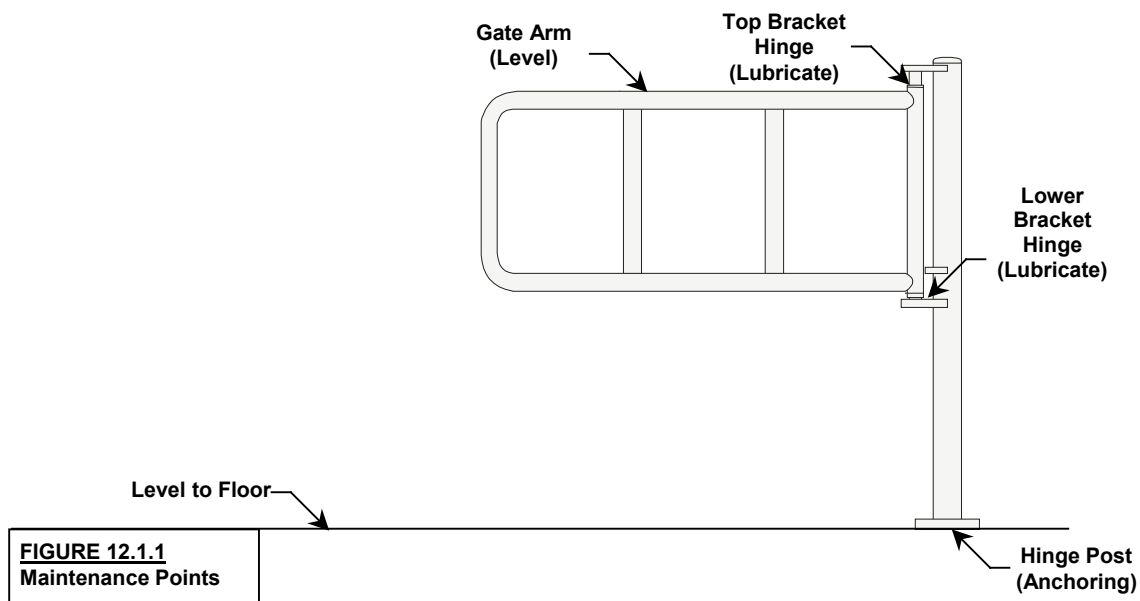
### Maintenance Points

#### Anchor Tension / Levelness

- Remove the base covers and check gate levelness and the tension of the anchors. Tighten to approximately 25 ft-lbs. clean accumulated dust and dirt away. Ensure the hinge post and gate arm is plumb and level. Ensure the gate arm and hinge post is at a 90-degree angle.

#### Lubrication on Pivot Points

- Lubricate the hinge/pivot points with grease and verify that the gate arm moves and self closes freely.



**FIGURE 12.1.1**  
Maintenance Points

## CLEANING

### Exterior Care

- Inspect the physical appearance of the gate and note if any cosmetic repairs are needed. Gate surfaces made of Stainless Steel with a #4 Satin Finish or a #8 Mirror Finish are selected for their corrosion resistance, strength, and aesthetic appeal. However, these turnstiles cannot be assumed to be completely maintenance free; especially since surface deposits will stain and discolor these materials. Scratches and dents through the finish may lead to rusting in Stainless Steel as well as other external components on the gate. In order to achieve maximum corrosion resistance and aesthetic appeal, the surfaces of the gates must be kept clean by following a simple routine cleaning schedule along with regular maintenance. This will ensure maximum performance and long service life of the turnstile.

### Care for Primary Finishes

#### **Stainless Steel #4 Satin Finish & #8 Mirror Finish**

- Stainless Steel surfaces may be cleaned using any commercially available polish or cleaner. If a heavier scratch or mark is apparent, a metal blend and finish pad (3M or equivalent) may be used. A quality automotive wax may be used to buff the gate after cleaning. Avoid using abrasive cleaning materials; a soft cleaning cloth is preferred.

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**NOTE:** Strong acid solutions should always be avoided when cleaning Stainless Steel finishes.

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## TROUBLESHOOTING

Items to check first:

- Check the gate for levelness and proper gate tension. Ensure the area is clear to operate properly.
- Perform a routine maintenance inspection by checking the “*Maintenance Points*” under the “*Maintenance Section*” to pinpoint possible causes of error.

Symptom(s)	Possible Cause(s)	Solution(s)
The gate arm does not self-close and fails to return to the center (home) position.	The ssg Gate is not properly lubricated.	Clean and lubricate the top bracket hinge point and lower pivot spring hinge point as described in the “Maintenance” section of this manual.
	The ssg Gate is not level.	Check the gate arm and latch post for level installation. Readjust or reposition the posts for correct operation. Instructions are provided in this manual under the section titled, “Layout & Installation.” Also ensure that the area is clear enough for proper operation.
	The gate arm bearing is loose, obstructed, or damaged.	Check the top bracket hinge and lower pivot spring hinge point for debris. Remove the debris if present and maintain the area to prevent future mishaps.