

ARMA Gate

EC142 Gate Installation



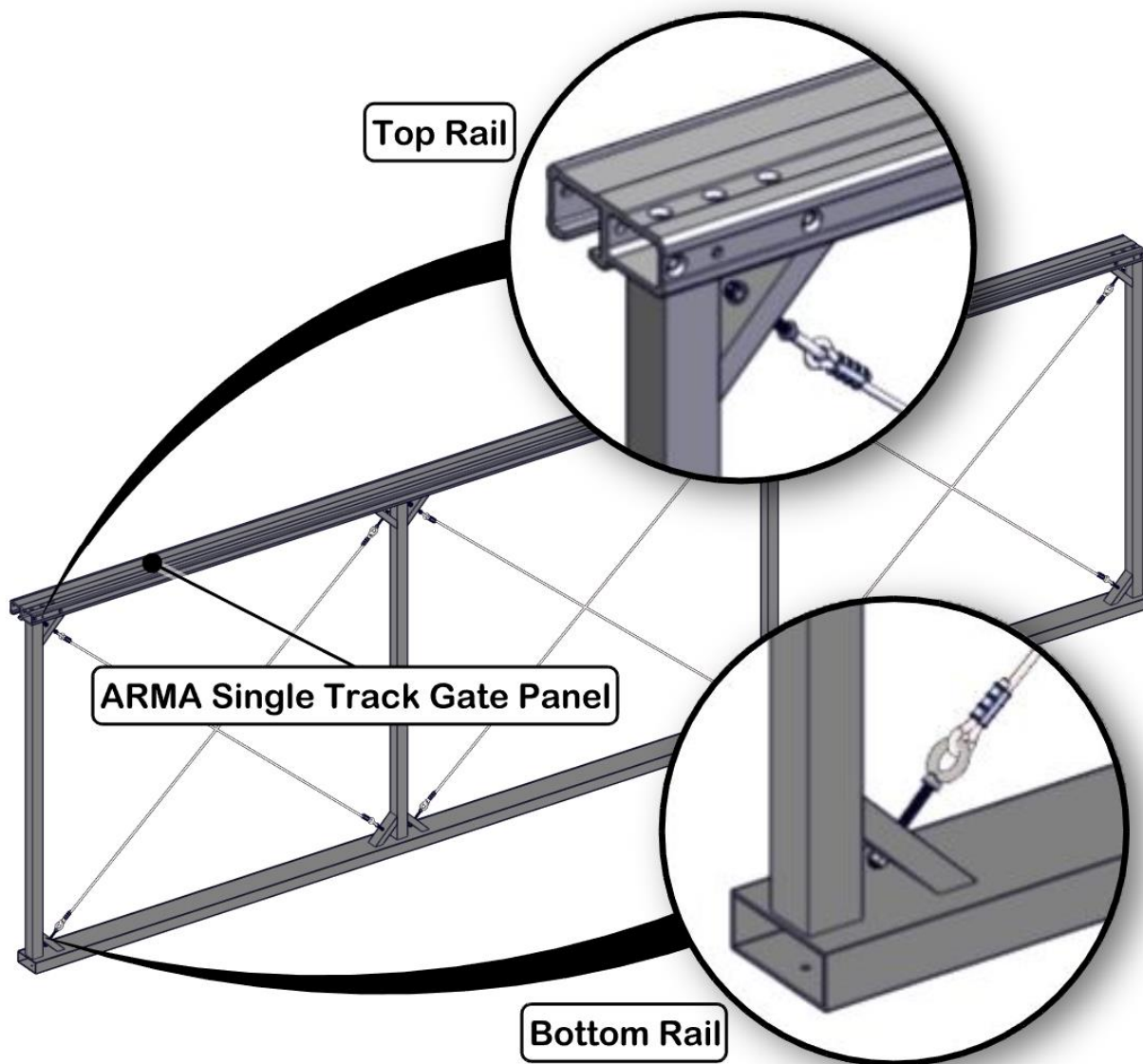


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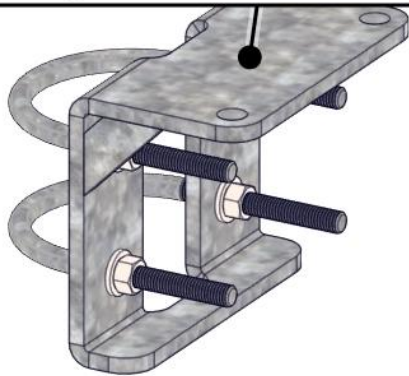


1. ARMA Gate Components

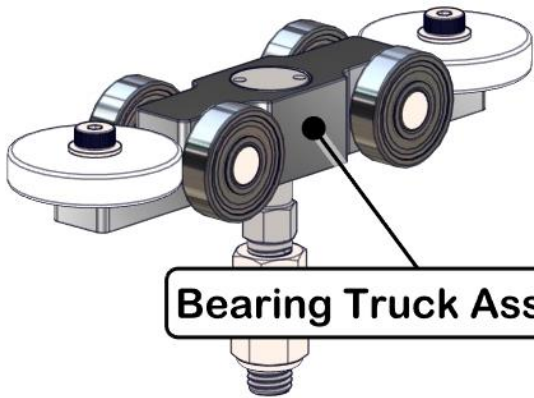
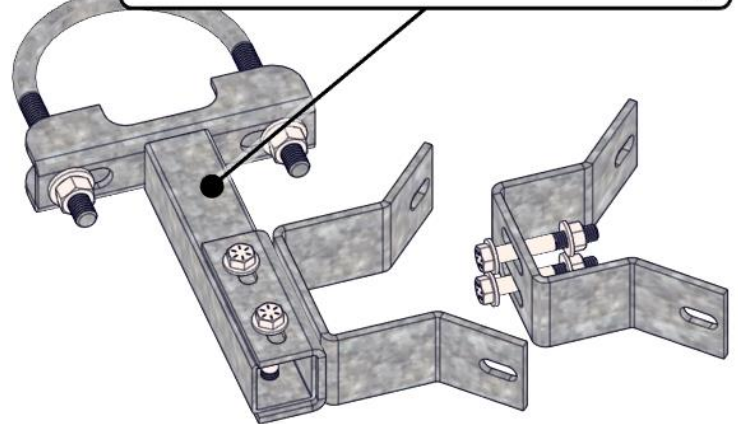




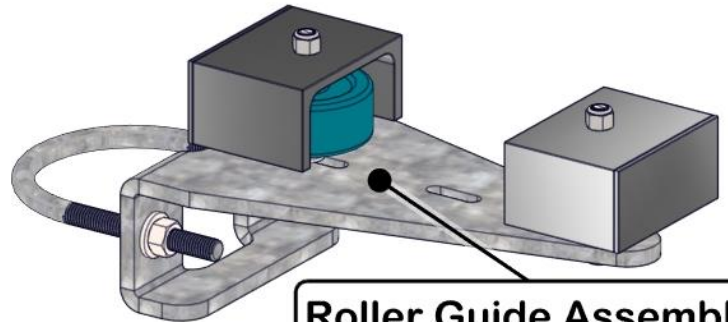
Bearing Truck Bracket Assembly



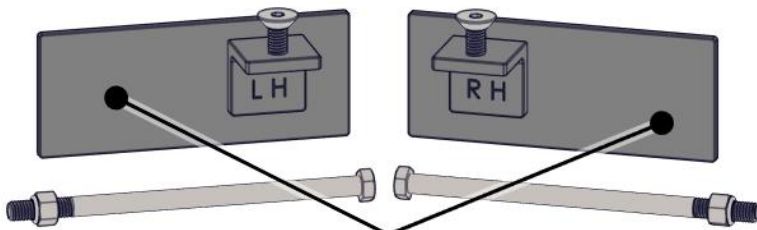
Gate Closure Guide Assembly



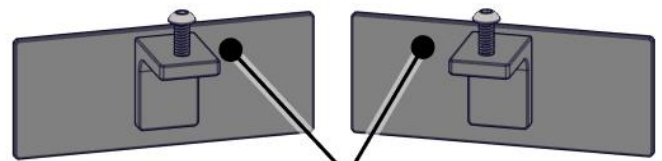
Bearing Truck Assembly



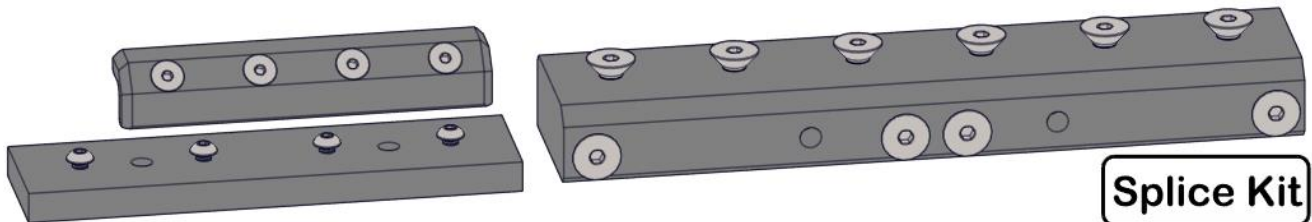
Roller Guide Assembly



Top Rail End Plate Kit



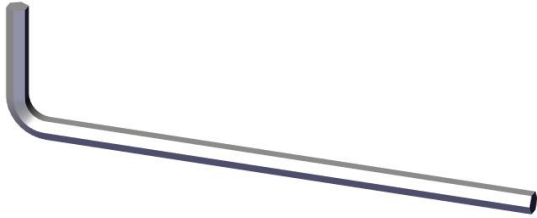
Bottom Rail End Plate Kit



Splice Kit

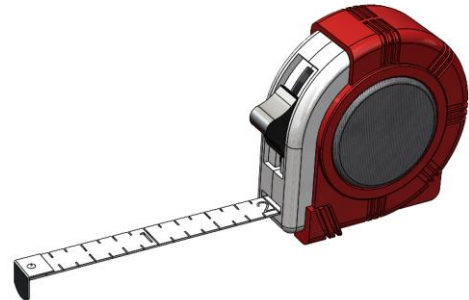


2. Tools Required

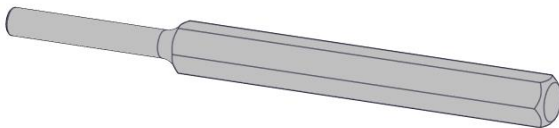


5/32" Hex Key

7/32 Hex Key



Tape Measure



3/8" Pin Punch



7/16" Wrench

1/2" Wrench

9/16" Wrench

3/4" Wrench

15/16" Wrench (2 required)



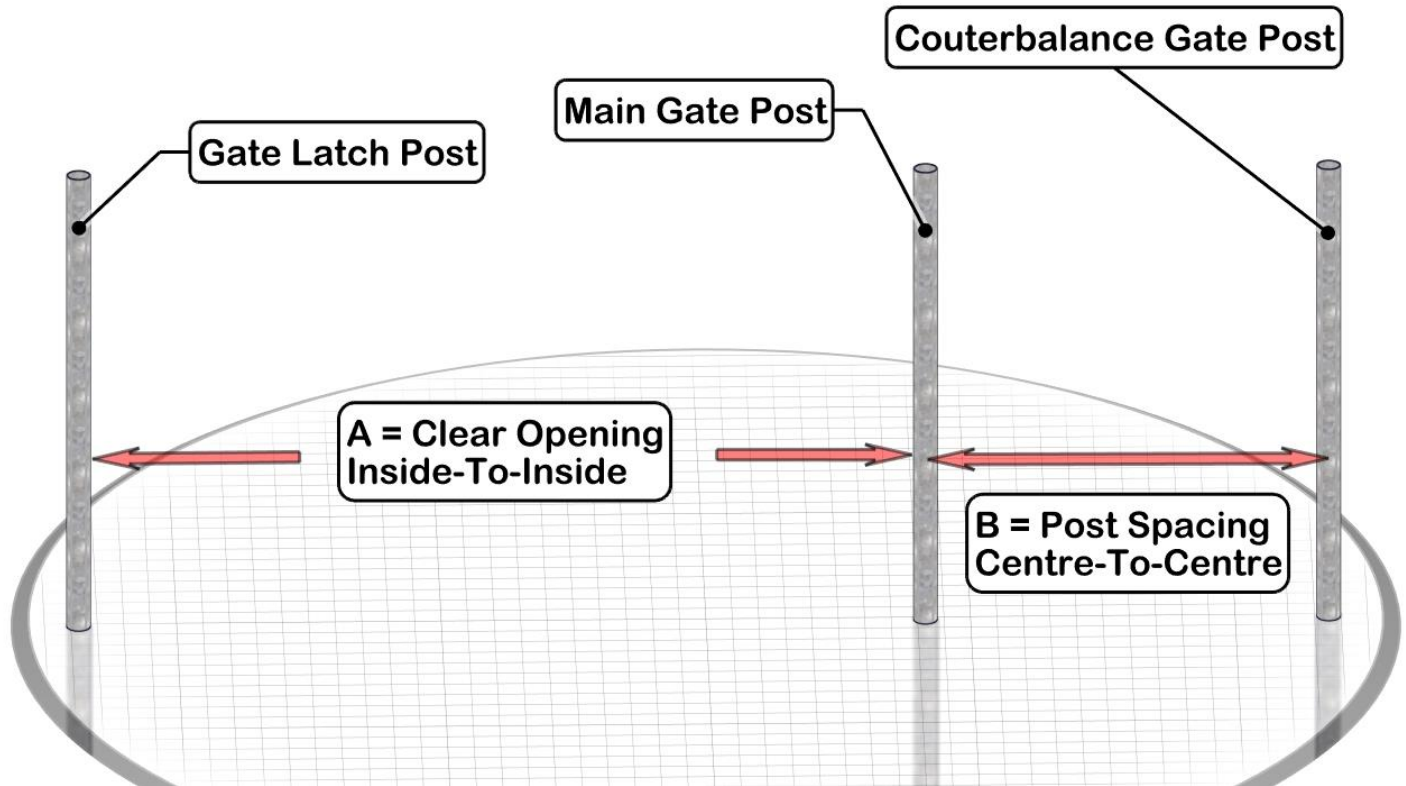
4 Foot Level



Rubber Mallet



3. Post Placement

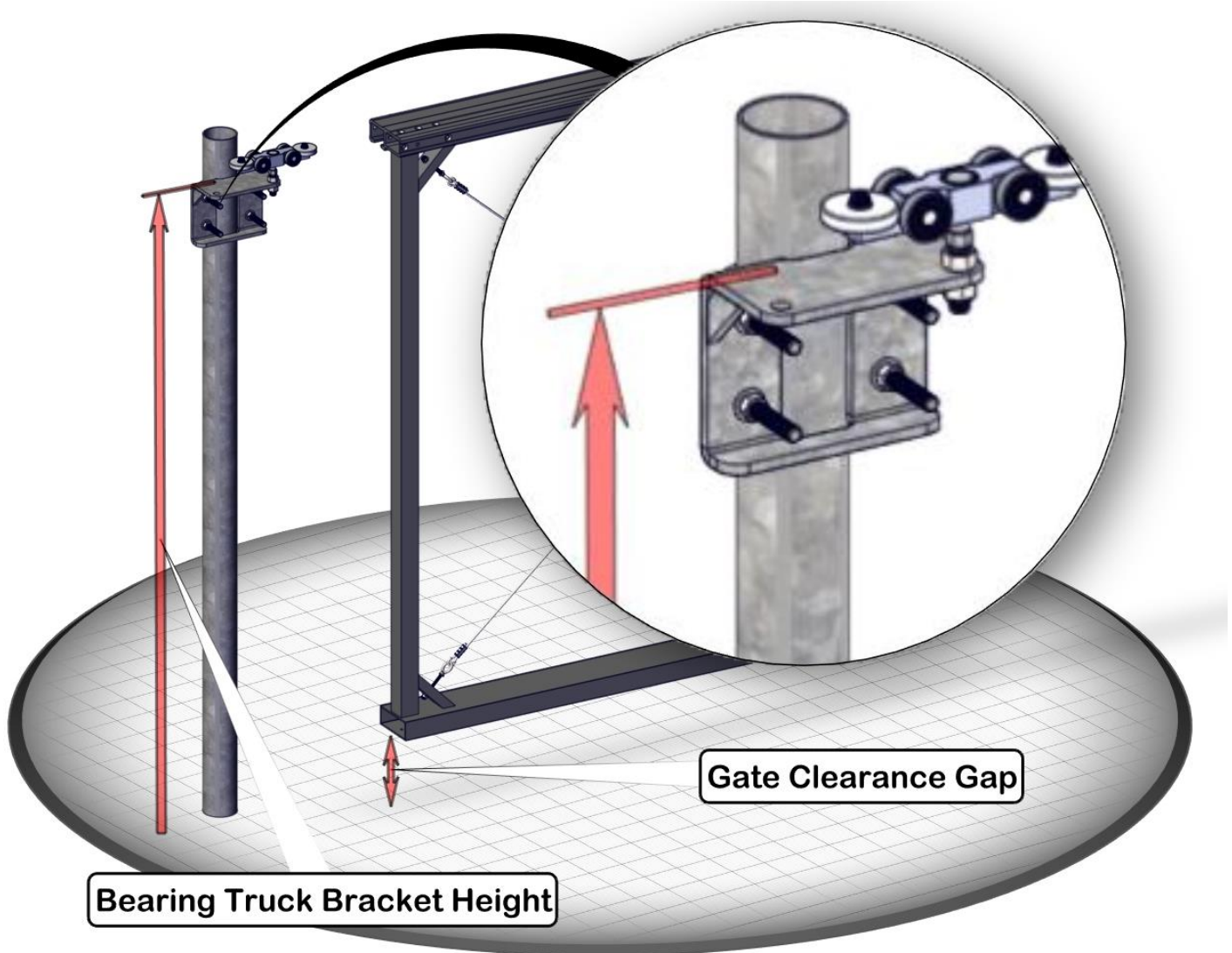


Steps:

- 3.1. Consult customer specification for post diameter, depth below grade and method of installation below grade.
- 3.2. "A" = Clear Opening between Gate Latch Post and Main Gate Post per customer specification. The measurement is from inside to inside of post.
- 3.3. Centre-To-Centre Spacing between Main Gate Post and Counterbalance Gate Post is determined by the following formula: $B \text{ (Post Spacing)} = (A / 2) - 11.0"$



4. Bearing Truck Bracket Installation



4.1. To determine the installation height of the Bearing Truck Brackets, first refer to customer specification for the Gate Clearance Gap.

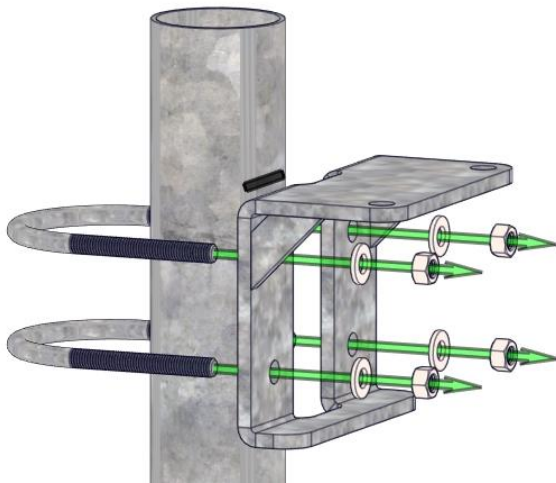
4.2. Determine the Bearing Truck Bracket installation height by measuring the height of the Gate Frame Segment, adding customer specified gate clearance gap and subtracting 3 ½".

$$\text{Gate Frame Height} + \text{Gate Clearance Gap} - 3 \frac{1}{2}"$$

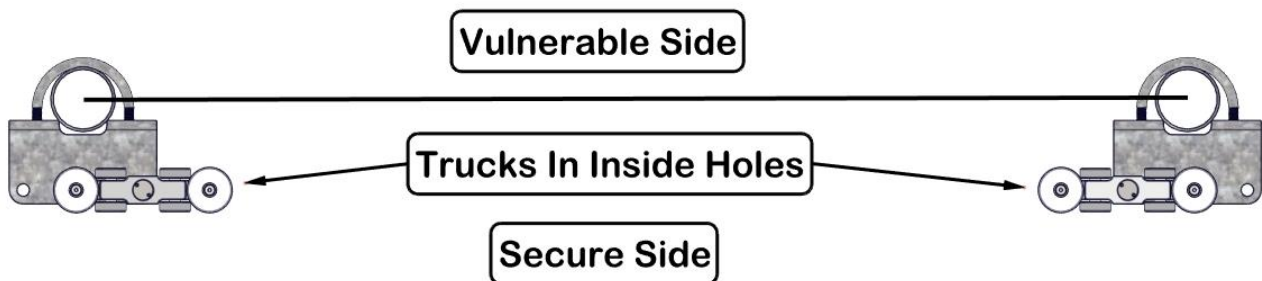


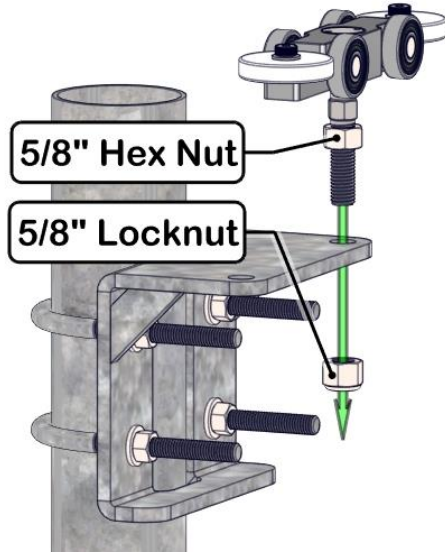
4.3. Measure the Bearing Truck Bracket height from the highest point of grade elevation and mark the height on the secure side of the Main Gate Post.

4.4. Transfer the level of the marked height from the Main Gate Post to the Counterbalance Gate Post.



4.5. Using the supplied U-Bolts, secure the Bearing Truck Brackets to the **secure side** of the Main Gate Post and Counterbalance Gate Post with the Bearing Truck Mount Flange surface at the marked height.





4.6. For ease of installation, turn 5/8" Regular Hex Head Nut on Bearing Truck until it bottoms out with unthreaded portion of shaft.

4.7. Attach Bearing Truck to inside hole of the Bearing Truck Bracket by removing 5/8" Locknut, then slide shaft through hole and screw on 5/8" Locknut. Install on the Main and Counterbalance Gate posts.

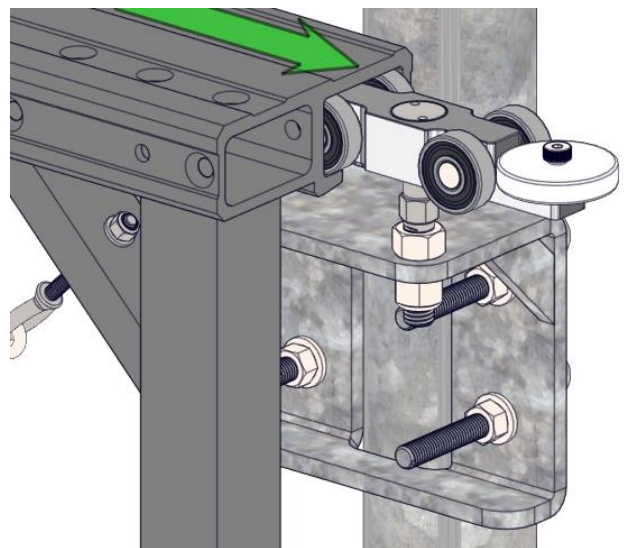
4.8. Final leveling of Gate Frame Segment will take place after the Gate Panels have been spliced together.

5. Gate Frame and Splice Kit Installation

5.1. ARMA Gate Segments are available in 10', 12' and 18' lengths. Gate segments should be installed in descending length order from longest first to shortest last.

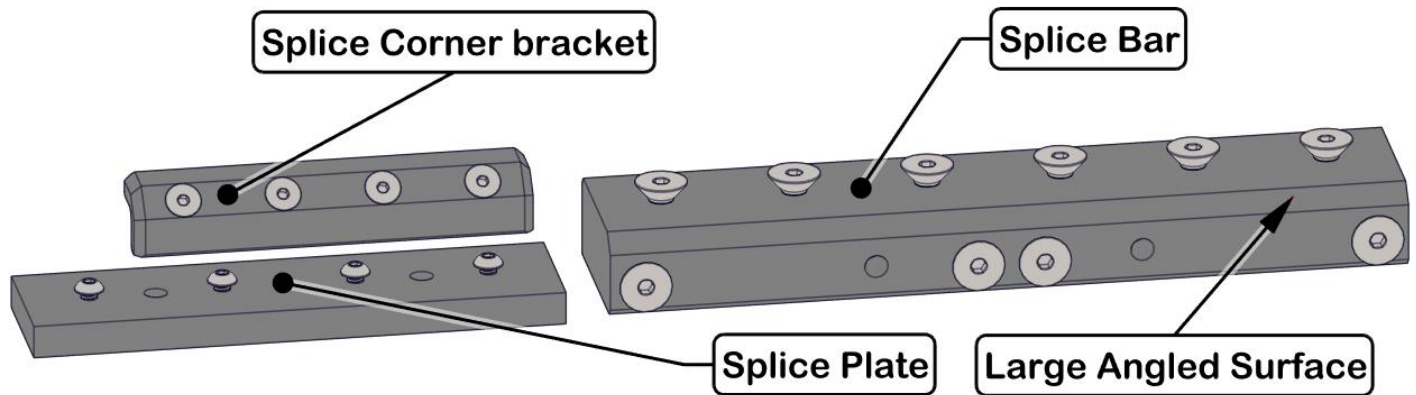
5.2. Identify the longest Gate Segment in your installation and slide it over the Main Gate Post Bearing Truck first and then onto the Counterbalance Post Bearing Truck.

5.3. If your Gate will be meshed with Chain Link, install it onto each Gate Segment before installing the Gate segments onto the Gate Posts as per industry standards.

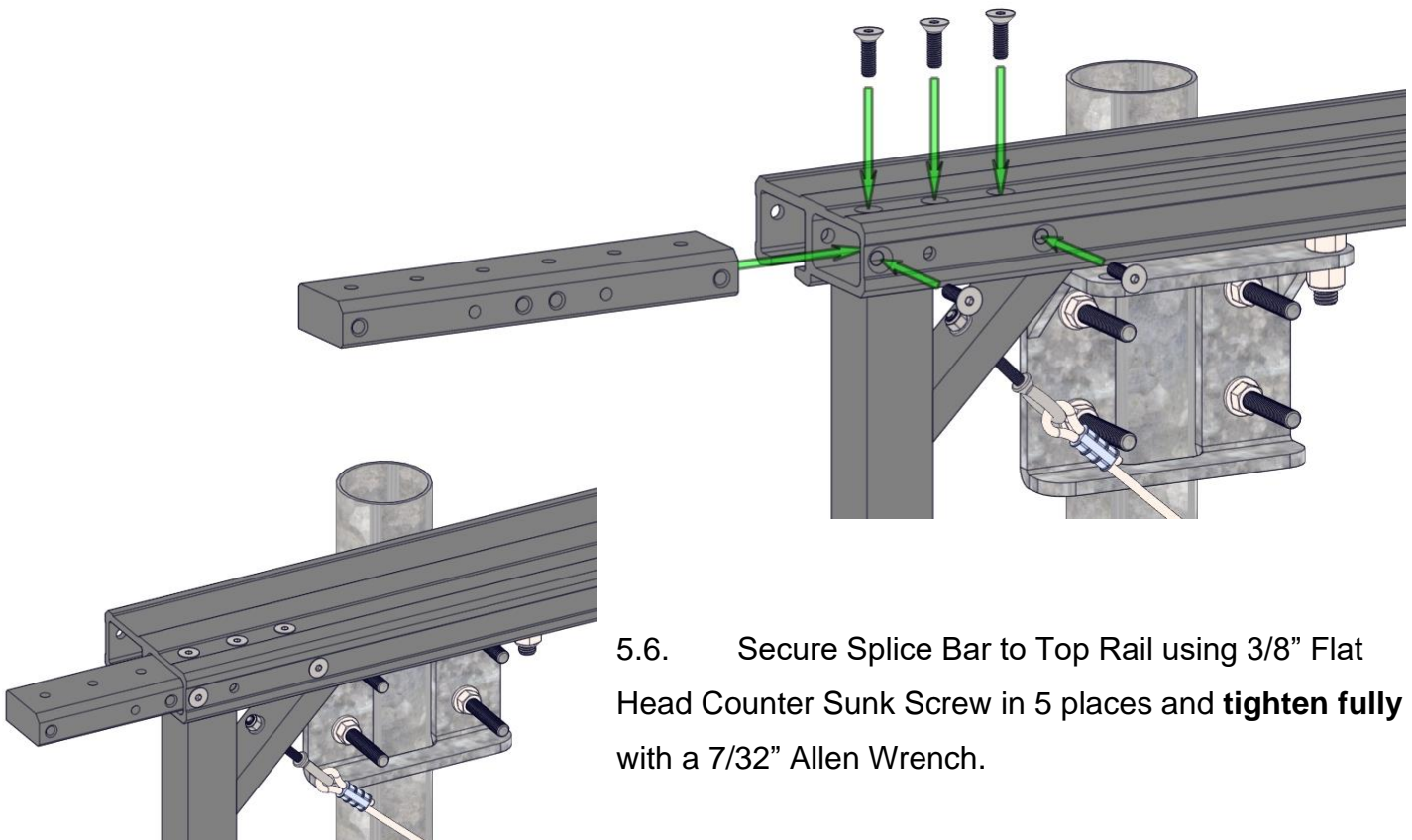




5.4. To prevent the installed Gate Frame Segment from moving during the splice step, secure it by wrapping a ratchet strap or rope around the Gate Segment Upright and the Main Gate Post.



5.5. At the Clear Opening side of the first Gate Segment install the Splice Bar with the large, angled surface oriented up and away from the Bearing Truck Track.

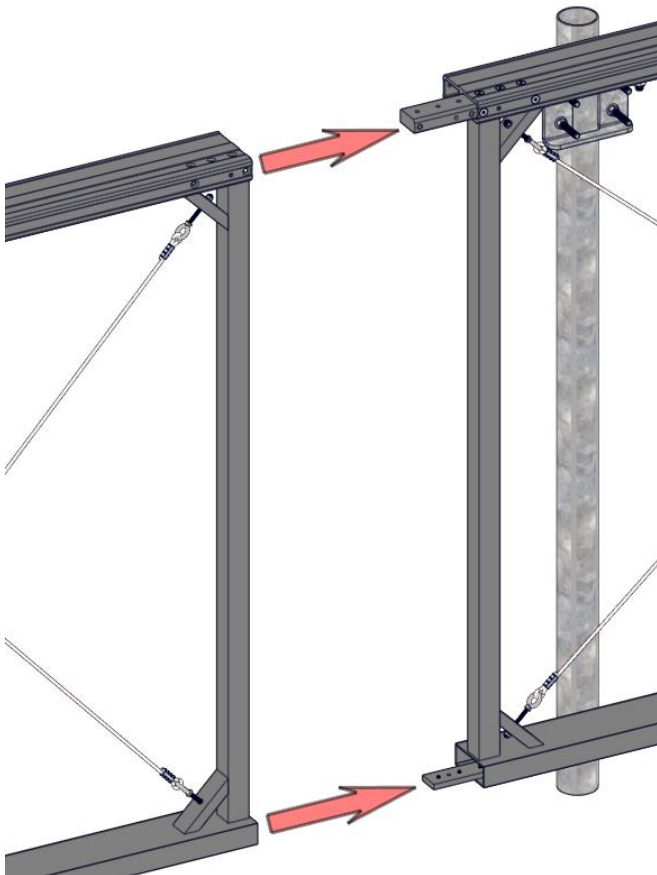
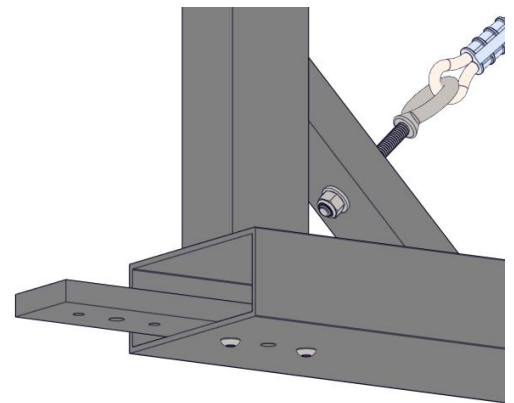
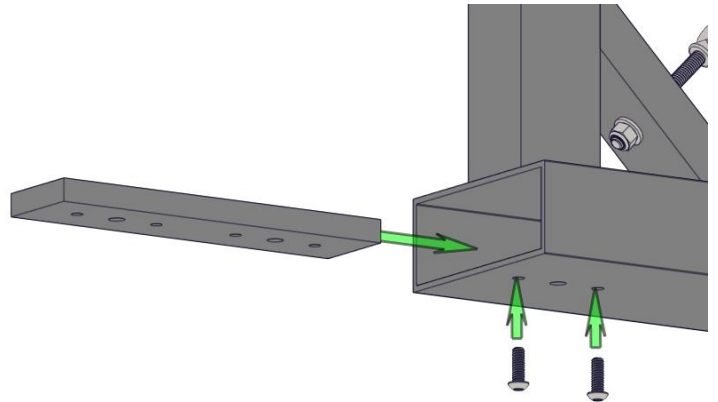


5.6. Secure Splice Bar to Top Rail using 3/8" Flat Head Counter Sunk Screw in 5 places and **tighten fully** with a 7/32" Allen Wrench.



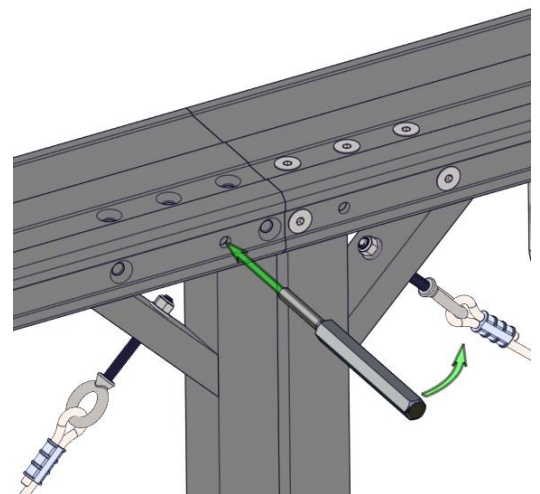
5.7. At the Clear Opening side of the first Gate Segment, insert the Bottom Rail Splice Plate into open cavity of the Bottom Rail and align holes.

5.8. Secure using 1/4" Button Head Screw in 2 places with a 5/32" Allen Wrench. **Do not tighten fully.**



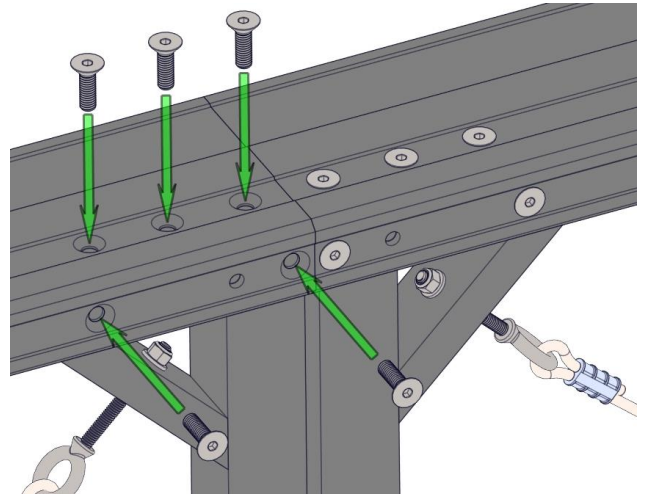
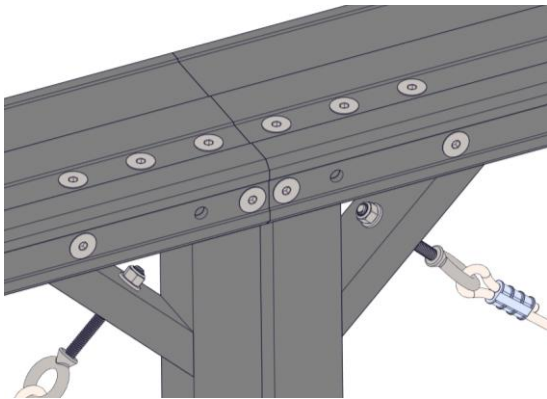
5.9. Align the next Gate Panel Segment to the Segment already installed on the Bearing Trucks by sliding the Top Rail over the Splice Bar and the Bottom Rail over the Splice Plate.

5.10. Insert a 3/8" Pin Punch into the alignment hole to help guide the Gate Segment into position if necessary.

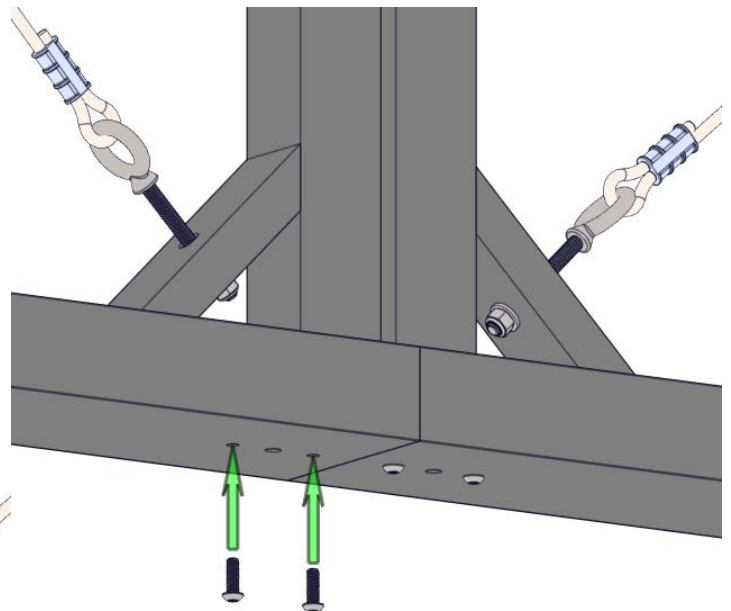
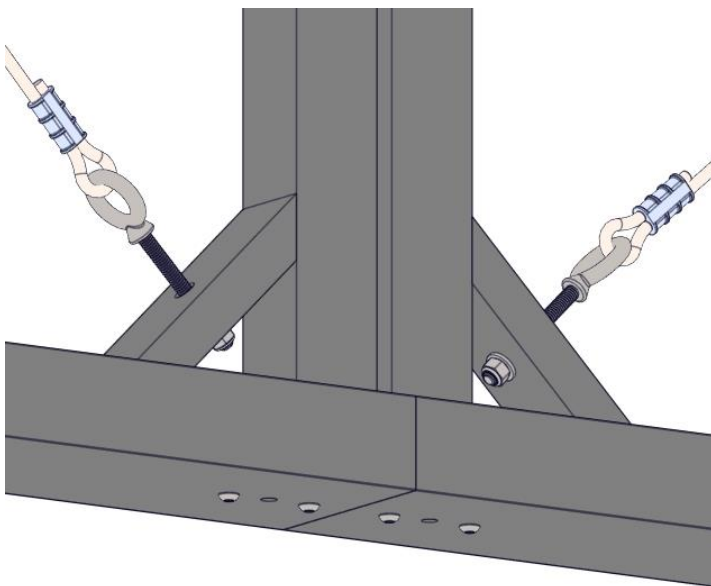


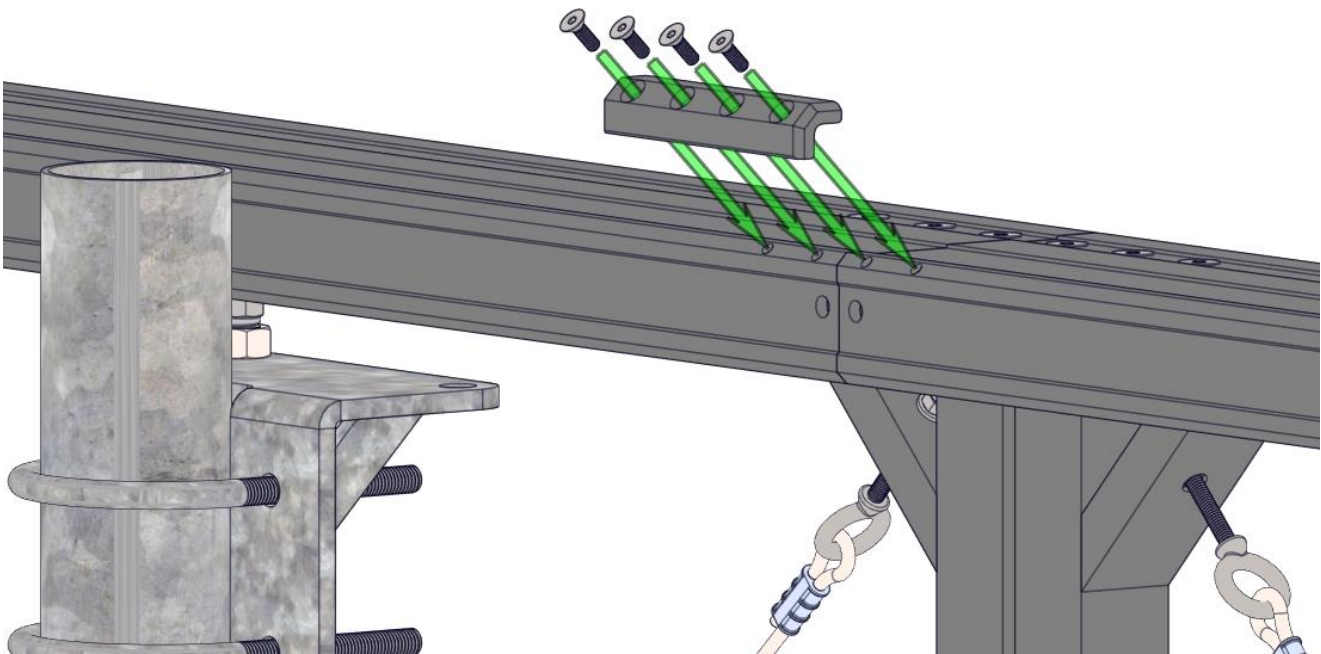


- 5.11. Secure Top Rail to Splice Bar with remaining 3/8" Flat Head Counter Sunk Screw 5 places and **tighten fully** with 7/32" Allen Wrench.



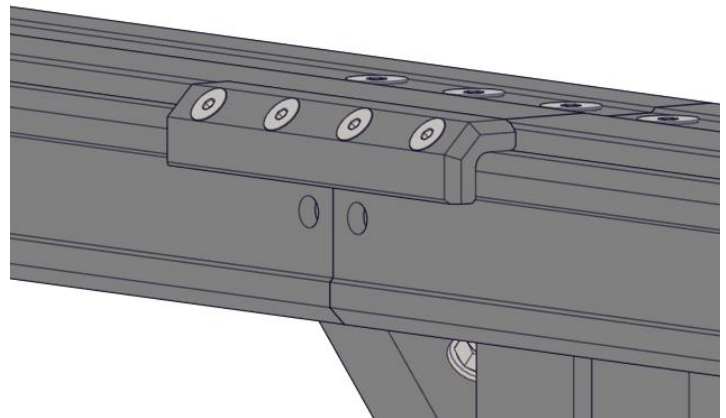
- 5.12. Secure Bottom Rail Splice to Plate with the remaining 1/4" Button Head Screws in 2 places. **Tighten fully all 4 Screws** with 5/32" Allen Wrench.





- 5.13. Install Splice Corner Bracket to Top Rail with 1/4" Flat Head Counter Sunk Screw in 4 places. **Tighten fully** with 5/32" Allen Wrench.

- 5.14. Repeat the Gate Panel Segment installation and splice procedure as required.

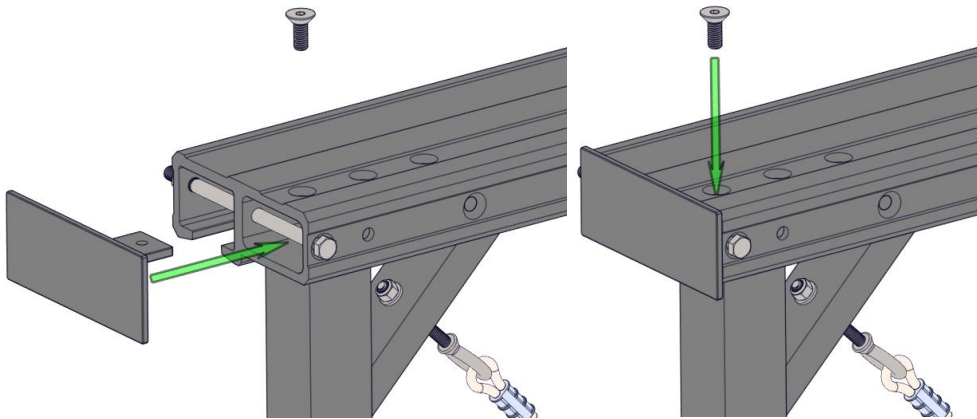
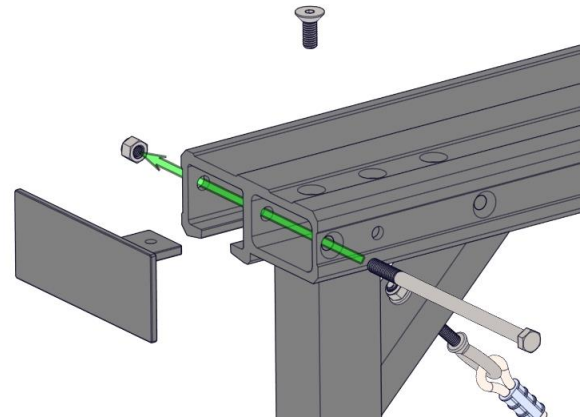




6. Top Rail End Cap Installation

6.1. Top Rail End Caps are side specific. Make sure to install the left-hand and right-hand Top Rail End Cap on the appropriate side of the Gate.

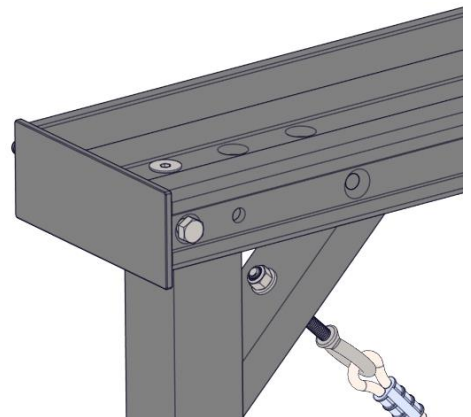
6.2. Insert 3/8" x 6.500" long Hex Head Screw through the holes on the side of Top Rail and screw on 3/8" Nylon Insert Hex Nut and **tighten fully**.



6.3. Insert the Top Rail End Cap into the Top Rail Cavity ensuring the End Cap threaded hole is aligned with the countersunk screw hole.

6.4. Secure the End Cap to Top Rail with the 3/8" Flat Head Counter Sunk Screw and **tighten fully** with a 7/32" Allen Wrench.

6.5. Repeat for the second Top Rail End Cap.

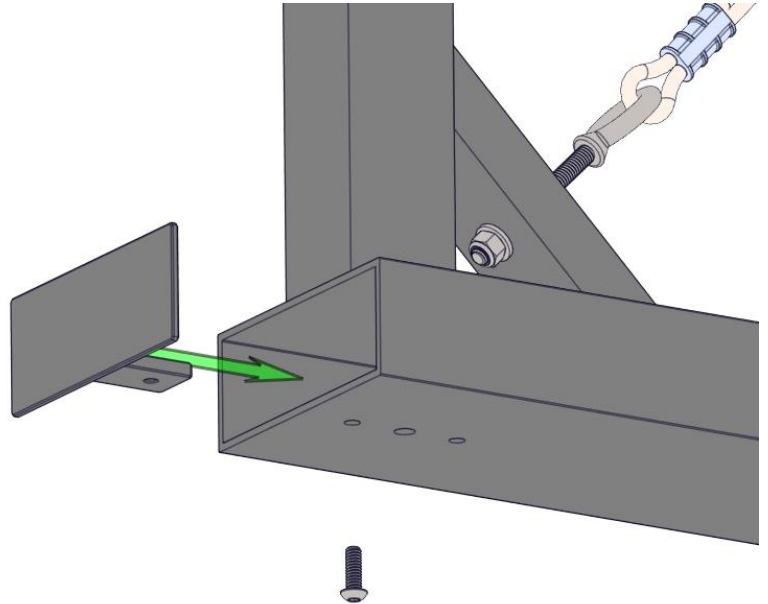




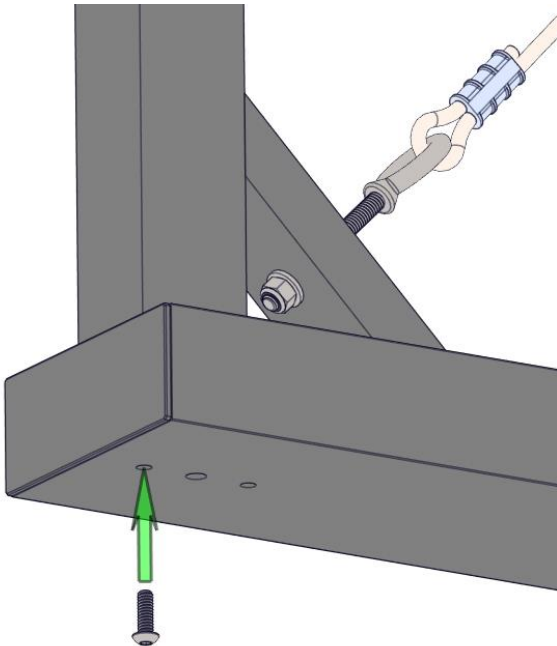
7. Bottom Rail End Cap Installation

7.1. Bottom Rail End Caps are **not** side specific. Both Bottom Rail End Caps can be installed on either side of the Gate.

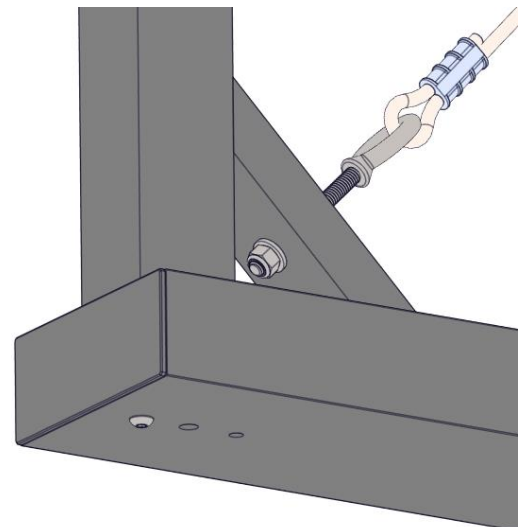
7.2. Insert the Bottom Rail End Cap into the Bottom Rail Cavity ensuring the End Cap threaded hole is aligned with the clearance hole in the Bottom Rail.



7.3. Secure Bottom End Cap to Bottom Rail with the 1/4" Screw and tighten fully with 5/32" Allen Wrench.



7.4. Repeat for the Second Bottom Rail End Cap.





8. ARMA Gate Leveling



8.1. Center the Gate between the Main Gate Post and Counterbalance Post and place a level on the Top Rail. The level should be midway between the two Posts.

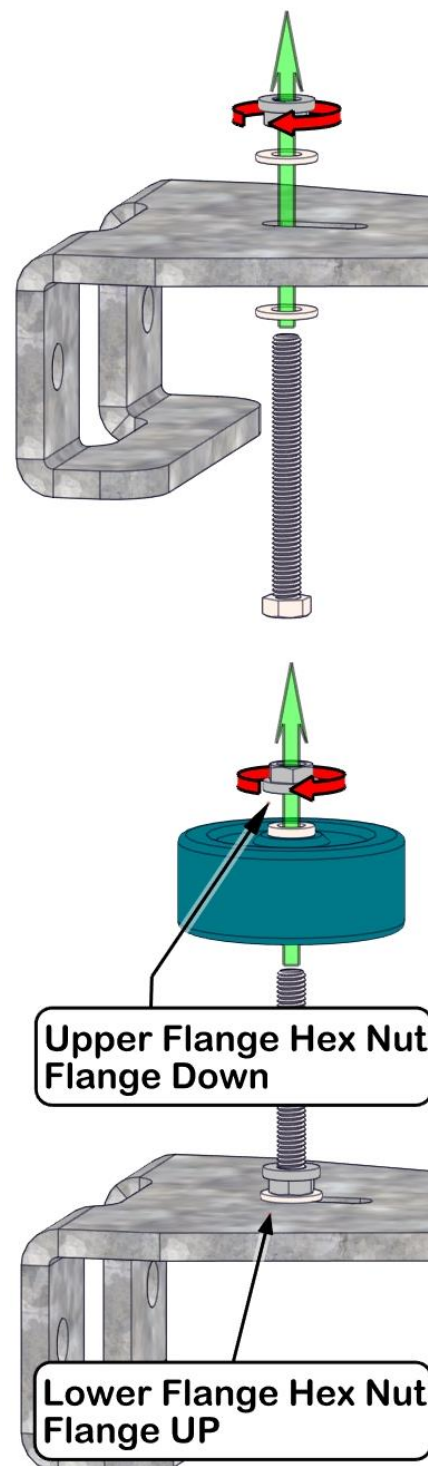
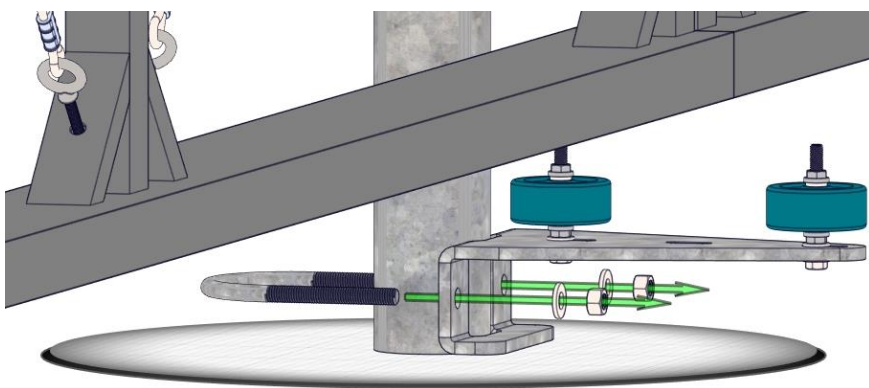
8.2. Adjust the 5/8" Regular Hex Head Nut and Hex Head Lock Nut on the Bearing Truck shaft until the gate is level.

8.3. For larger adjustments, loosen off U-Bolt 1/2" Hex Nuts and raise or lower the Bearing Truck Bracket by striking it with a mallet to desired height then retighten nuts. (See Step 2 above)

8.4. Complete any fine tuning by adjusting 5/8" Regular Hex Head Nut and Hex Head Lock Nut on Bearing Truck shaft.

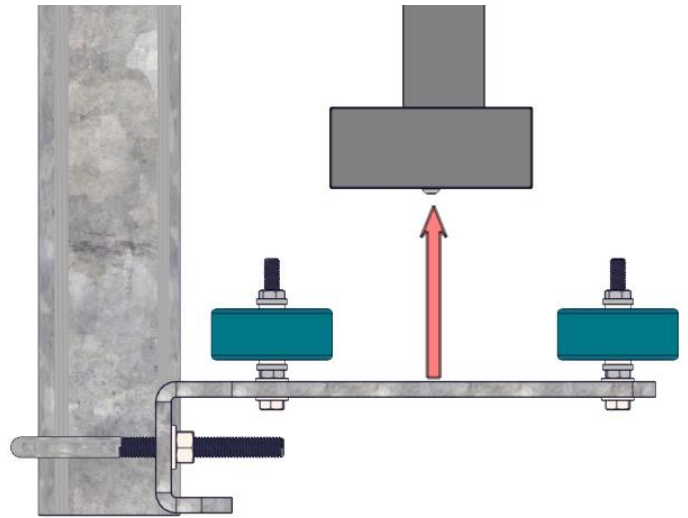
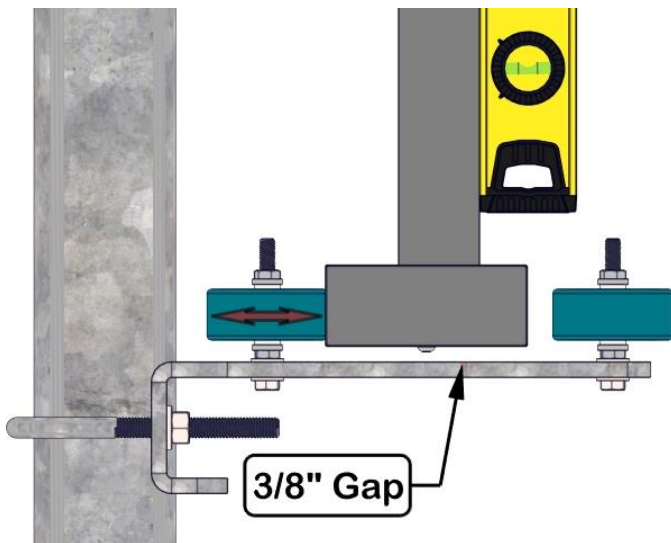
9. Roller Guide Assembly And Installation

- 9.1. Install the 3/8" Hex Head Screw into the first Roller Guide Bracket slot (1 washer on each side of bracket) and thread the Lower 3/8" Hex Flange Nut onto the screw. Make sure the Nut flange is facing the Wheel (up). Snug up but **do not fully tighten**.
- 9.2. Slide the Roller Guide Wheel with Hub over the 3/8" Hex Screw. Thread the Upper 3/8" Hex Flange Nut onto the Screw with the Nut flange facing the Wheel (down). Snug up but **do not fully tighten**.
- 9.3. Install the second Guide Wheel into the second Guide Wheel Bracket Slot following the same procedure as above.
- 9.4. Slide the Guide Wheel Assembly under the Gate at the Main Gate Post and secure it with the U-Bolt. **Do not fully tighten**.

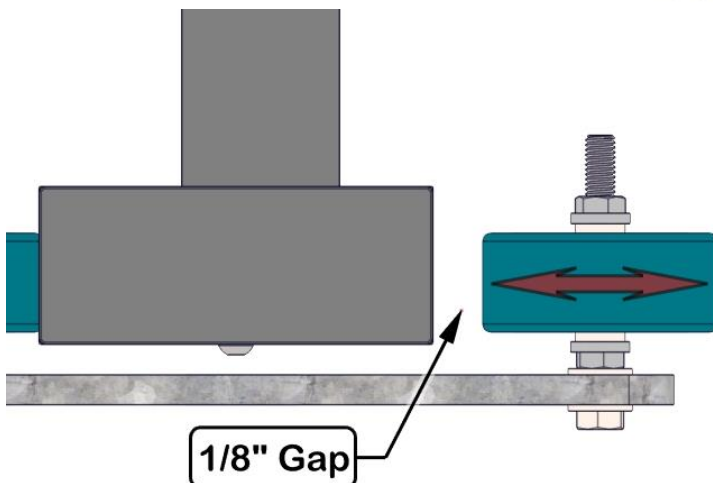
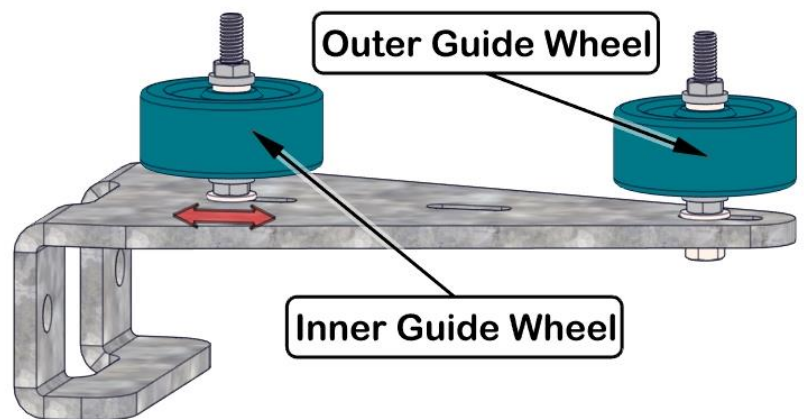




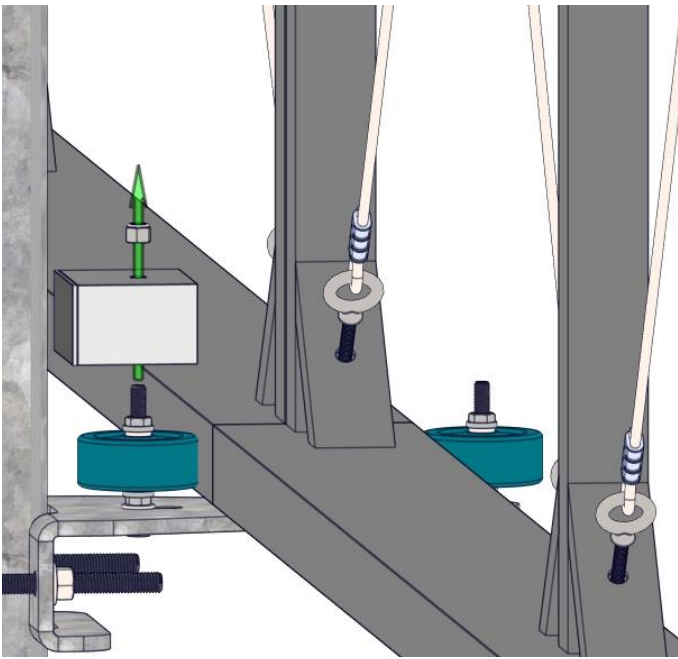
- 9.5. Slide the Guide Wheel Assembly up toward the Gate leaving a 3/8" Gap between the Gate Bottom Rail and the Guide Wheel Bracket. **Fully tighten the 1/2" U-bolt Nuts.**



- 9.6. Plumb the Gate by positioning the Inner Guide Wheel in the Guide Wheel Bracket slot and **fully tighten** the Lower Flange Hex Nut to fix the Inner Guide Wheel firmly into the Bracket.

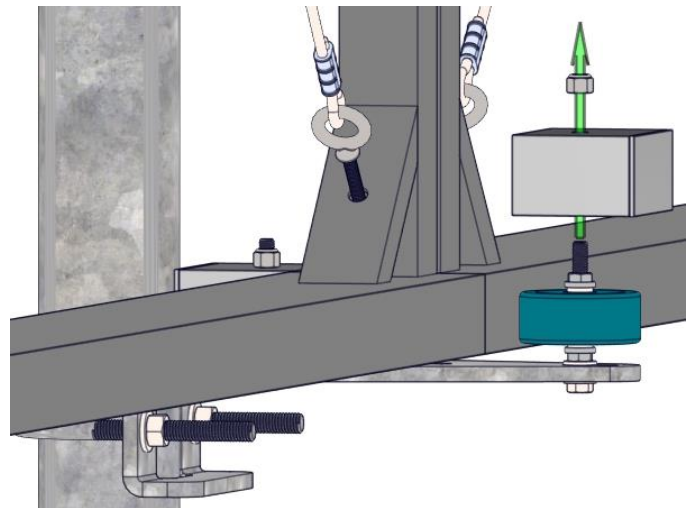


- 9.7. Position the Outer Guide Wheel in the Guide Wheel Bracket slot, leaving a 1/8" Gap between the wheel and the Gate Bottom Rail and **fully tighten** the Lower Flange Hex Nut.

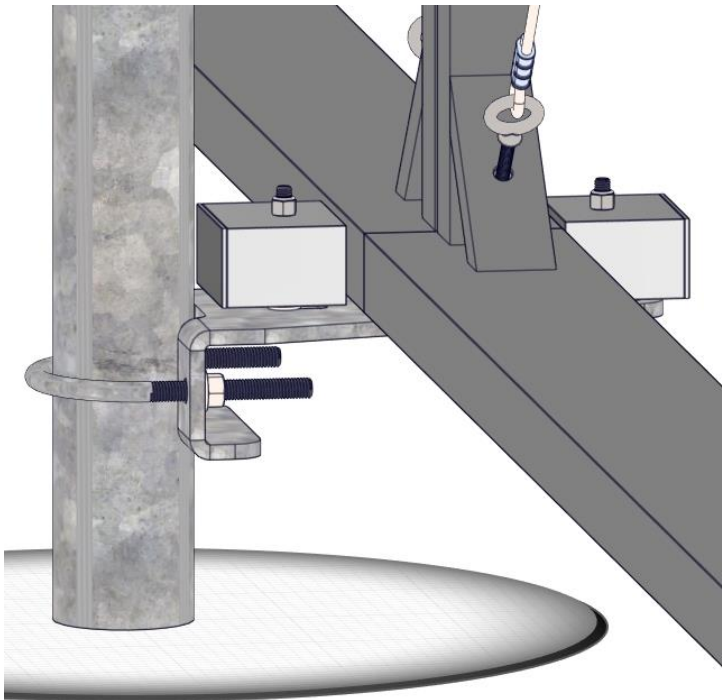


9.8. Install the Inner Guide Wheel Cover onto the 3/8" Hex Screw and secure it with the 3/8" lock nut.

9.9. Install the Outer Guide Wheel Cover onto the 3/8" Hex Screw and secure it with the 3/8" lock nut.

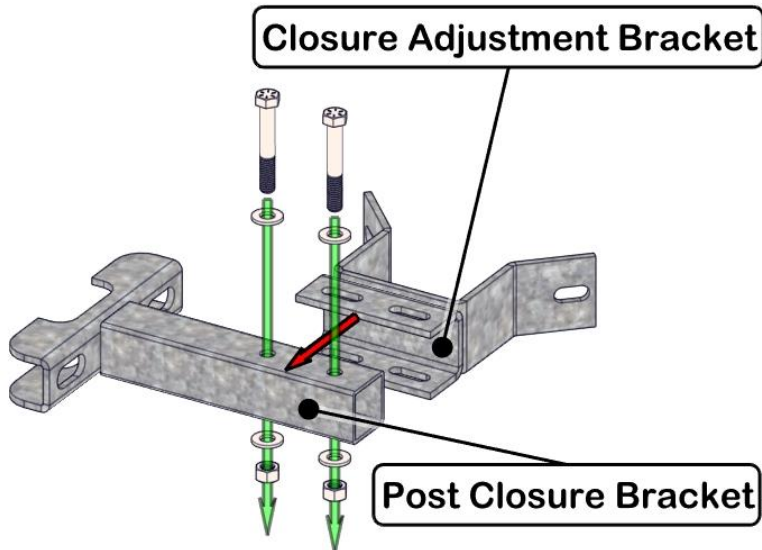


9.10. Install the second Roller Guide Assembly onto the Cantilever Gate Post by following the procedure outlined above.



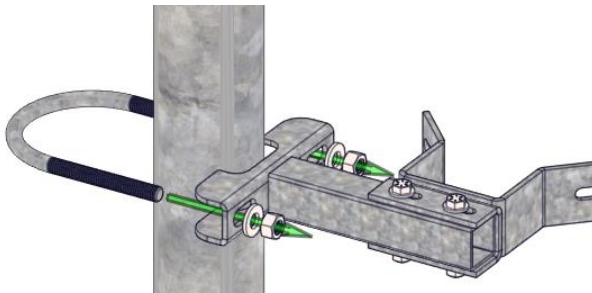


10. Gate Closure Guide Assembly And Installation

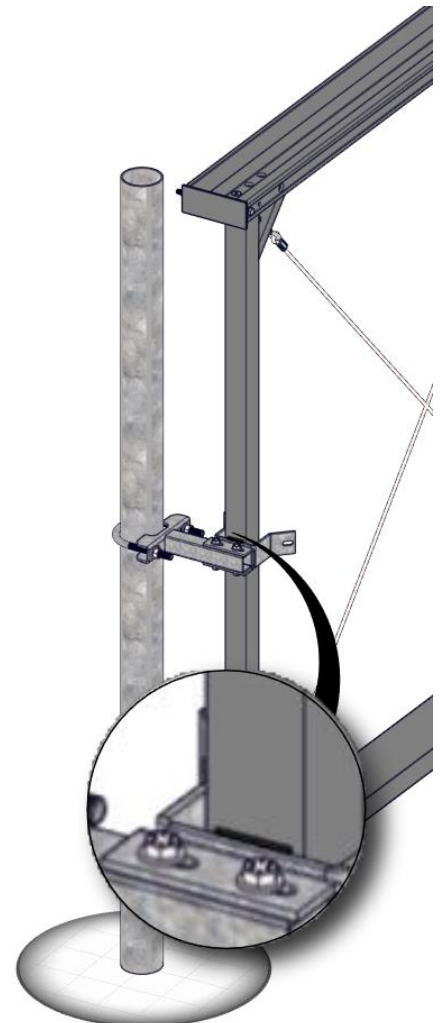


10.1. Assemble the Gate Closure Guide Assembly by connecting the Closure Adjustment Bracket onto the Post Closure Bracket using the 3/8" Hex Head Screws and 3/8" Locknuts. **Do not fully tighten.**

10.2. Secure the Gate Closure Guide Assembly at the desired height onto the Closure Guide Post using the U-Bolt and **fully tighten** the 1/2" Nuts.



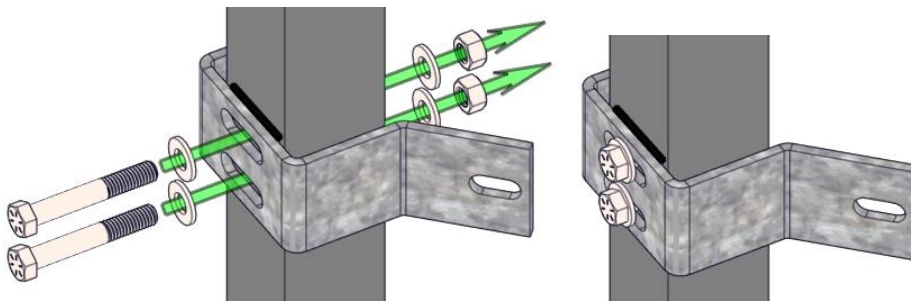
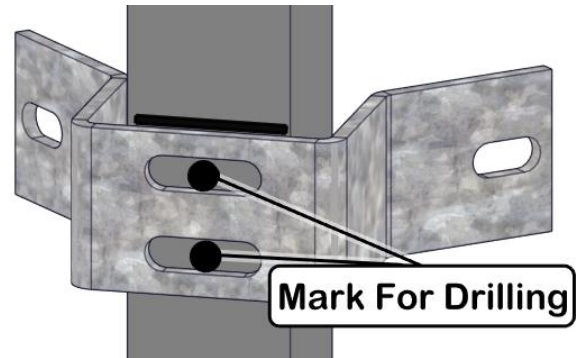
10.3. Slide the Gate until it contacts the Gate Closure Guide Assembly (closed position) and mark the mounting height of the Post Closure Guide.





10.4. Align the Post Closure Guide onto the Gate Post at the marked height and lay out the location of the slot centers.

10.5. Mark and drill clearance holes for the 3/8" Hex Screws in the Gate Post at the marked locations.



10.6. Install the Post Closure Guide onto the Gate Post and **fully tighten** the 3/8" Hex Screws.

10.7. Adjust the Closure Adjustment Bracket and Post Closure Guide as required to achieve proper Gate closure. **Fully tighten** the 4 Hex screws.

