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200 Mero Street Frankfort, Kentucky 406 01

CONSTRUCTION MEMORANDUM

No. 01-2025

MAINTENANCE MEMORANDUM

TO: Chief District Engineers

TEBMs for Project Delivery and Preservation

Section Engineers

FROM: Matthew P. Simpson, P.E.

Director

Division of Construction

Josh Rogers, P.E.

Director

Division of Maintenance

DATE: January 22, 2025

SUBJECT: Valtir SoftStop System Installation Review

It has been discovered that multiple installations of the Valtir SoftStop System Type I Guardrail End Treatments have been installed contrary to the manufacture's installation manual. The manufacture's installation manual (See Attachment, Pages 27 through 31, Steps 4 through 6B.) requires the spacer block to be bolted at Post #2, but the Anchor Rail is not bolted at this location. The manual further states: "Warning: Do not bolt SoftStop Anchor Rail to Post 2. Failure to follow this warning could result in serious injury or death in the event of a collision." However, incorrect installations have been discovered to be bolted at Post #2 on work completed by both Maintenance projects under Master Agreement contracts and Construction projects let through Construction Procurement. District staff should expeditiously locate Valtir SoftStop installations within their district, inspect, and schedule repairs if necessary. On any project not formally accepted the repair will be considered necessary corrective work.

Attachments: Example Installation pictures, excerpt from Valtir Softstop System Product Manual

MPS

Cc: District PD&P TEBMs and Section Engineers

KAHC

KYTC Prequalified Guardrail Contractors



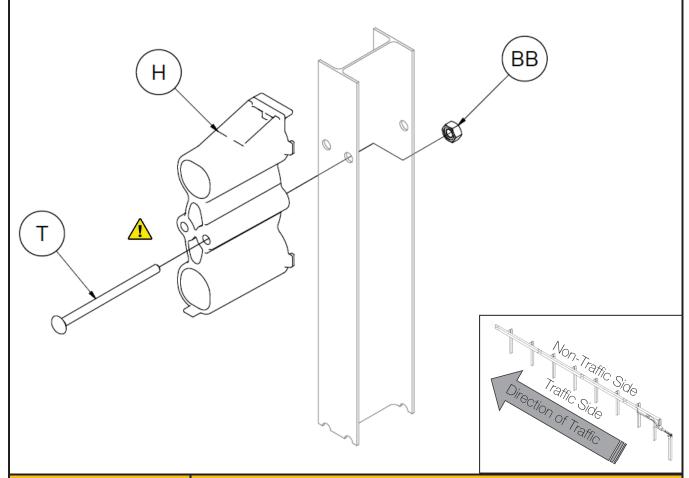
<u>Correct Installation</u> (Notice no bolt is visible at Post No.2)



<u>Incorrect Installation</u> (Notice Bolt is visible and bolted through the rail at Post No.2)



STEP 4 8" Composite Block Assembly (Post 2)



PARTS		
Н	Various	1 EA
Т	3500G	1 EA
BB	3340G	1 EA

INSTRUCTIONS

- 1. Assemble all parts in the configuration and orientation shown above.
- 2. Attach (1 EA) 8" [203 mm] Composite Offset Block (Part H) on traffic side of Post 2. The 8" [203 mm] Composite Offset Block is typically equipped with a self-hanging mounting tab.
- 3. Secure Offset Block to post with shown hardware, utilizing either block/post bolt hole.
- 4. Tighten the threaded hardware to a snug position with an appropriately sized wrench or socket, ensuring a minimum of two bolt threads are protruding beyond the nut.

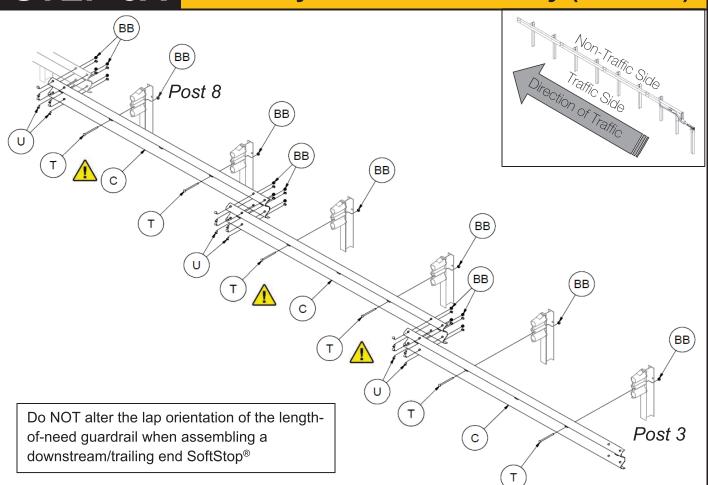
Use only Valtir parts that are specified herein for the SoftStop® System for assembling, maintaining, or repairing the SoftStop® System. Do not utilize or otherwise commingle parts from other systems even if those systems are Valtir systems.



WARNING

Do not use any 8" [203 mm] Composite Offset Blocks (Part H) if they show signs of damage. Seek replacement from Valtir prior to assembly.

STEP 5A 12'-6" System Rail Assembly (Post 3-8)



PARTS		
С	11G	3 EA
Т	3500G	6 EA
U	3360G	24 EA
BB	3340G	30 EA

INSTRUCTIONS

- 1. Utilizing the block/post bolt hole which best aligns with the slot in the System Rail panels, assemble all parts in the configuration and orientation shown above.
- 2. Place all System Rail panels (Part C) on the traffic side of the posts and lap all System Rail panels in the direction of traffic immediately adjacent to the guardrail installation as shown above, using shown hardware.
- 3. Tighten all threaded hardware to a snug position with an appropriately sized wrench or socket, ensuring a minimum of two bolt threads are protruding beyond the nut.

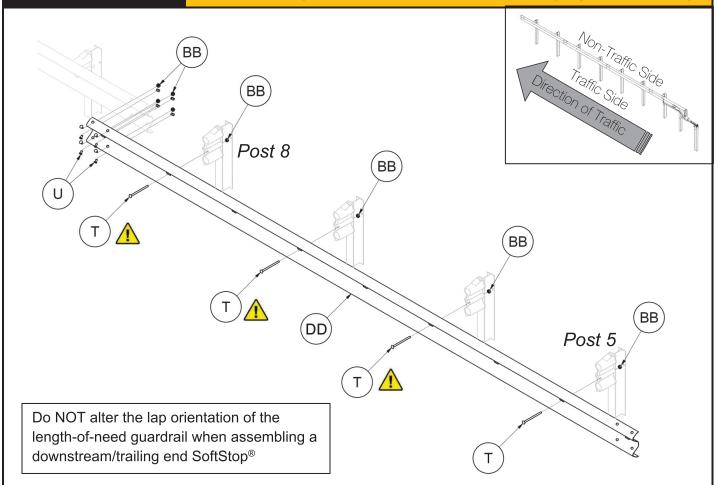
Use only Valtir parts that are specified herein for the SoftStop® System for assembling, maintaining, or repairing the SoftStop® System. Do not utilize or otherwise commingle parts from other systems even if those systems are Valtir systems.



WARNING

Do not place anything between any post bolt head and the SoftStop® System Rail that would prevent the bolt from pulling through (i.e. no rectangular washers or delineators). Failure to follow this warning could result in serious injury or death in the event of a collision.

STEP 5B 25'-0" System Rail Assembly (Post 5-8)



PARTS		
DD	61G	1 EA
Т	3500G	4 EA
U	3360G	8 EA
BB	3340G	12 EA

INSTRUCTIONS

- 1. Utilizing the block/post bolt hole which best aligns with the slot in the System Rail panel, assemble all parts in the configuration and orientation shown above.
- 2. Place all System Rail panels (Part DD) on the traffic side of the posts and lap System Rail panel in the direction of traffic immediately adjacent to the guardrail installation as shown above, using shown hardware.
- 3. Tighten all threaded hardware to a snug position with an appropriately sized wrench or socket, ensuring a minimum of two bolt threads are protruding beyond the nut.

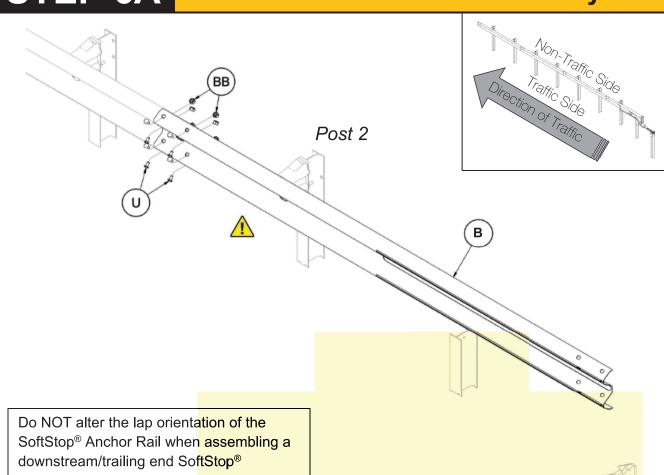
WARNING

Use only Valtir parts that are specified herein for the SoftStop® System for assembling, maintaining, or repairing the SoftStop® System. Do not utilize or otherwise commingle parts from other systems even if those systems are Valtir systems.



Do not place anything between any post bolt head and the SoftStop® System Rail that would prevent the bolt from pulling through (i.e. no rectangular washers or delineators). Failure to follow this warning could result in serious injury or death in the event of a collision.

12'-6" Anchor Rail Assembly





PARTS		
В	15200G	1 EA
U	3360G	8 EA
BB	3340G	8 EA

INSTRUCTIONS

- 1. Assemble all parts in the configuration and orientation shown above. The portion of the SoftStop® Anchor Rail with the three (3) longitudinal slots shall be placed with the slots closest to the SoftStop® Anchor Post (Post 0).
- 2. Place SoftStop® Anchor Rail (Part B) on the traffic side and lap in the direction of traffic immediately adjacent to the guardrail installation as shown above, using shown hardware.
- 3. Tighten all threaded hardware to a snug position with an appropriately sized wrench or socket, ensuring a minimum or two bolt threads are protruding beyond the nut.

WARNING

Use only Valtir parts that are specified herein for the SoftStop® System for assembling, maintaining, or repairing the SoftStop® System. Do not utilize or otherwise commingle parts from other systems even if those systems are Valtir systems.

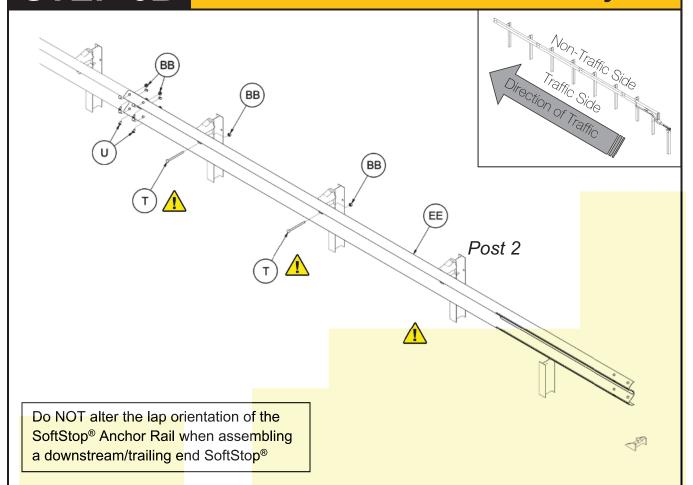


Do not bolt the SoftStop® Anchor Rail to Post 2.

Failure to follow this warning could result in serious injury or death in the event of a collision.

STEP 6B

25'-0" Anchor Rail Assembly



PARTS			
Т	3500G	2	
U	3360G	8	
BB	3340G	10	
EE	15215G	1	

INSTRUCTIONS

1. Utilizing the block/post bolt hole which best aligns with the slot in the SoftStop® Anchor Rail, assemble all parts in the configuration and orientation shown above.

The portion of the SoftStop® Anchor Rail with the three (3) longitudinal slots shall be placed with the slots closest to the SoftStop® Anchor Post (Post 0).

- 2. Place SoftStop® Anchor Rail (Part EE) on the traffic side and lap in the direction of traffic immediately adjacent to the guardrail installation as shown above, using shown hardware.
- 3. Tighten all threaded hardware to a snug position with an appropriately sized wrench or socket, ensuring a minimum of two bolt threads are protruding beyond the nut.

Use only Valtir parts that are specified herein for the SoftStop® System for assembling, maintaining, or repairing the SoftStop® System. Do not utilize or otherwise commingle parts from other systems even if those systems are Valtir systems.



WARNING

Do not bolt the SoftStop® Anchor Rail to Post 2. Do not place anything between any post bolt head and the SoftStop® System Rail that would prevent the bolt from pulling through. Failure to follow this warning could result in serious injury or death in the event of a collision.