

# Assembly Inspection Checklist (File With Project Folder)

Performed by: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

- Ensure required traffic control is in place to conduct SoftStop® System assembly. (p. 5)
- Ensure only Trinity Highway SoftStop® System parts are used for the assembly of the SoftStop® System and that all parts are free of damage. (p. 5)
- Ensure proper site grading complies with state/specifying agency guidelines or AASHTO Roadside Design Guide, whichever is more stringent. (p. 14)
- Ensure that soil around all posts is properly compacted and posts are free to rotate. When leave-outs are necessary, use only state/specifying agency approved backfill material within the leave-out area. (p. 19)
- Ensure SoftStop® System offset does not exceed max allowed by test level and radii. (pp. 16-17)
- Ensure no rail panels, between Post 0 and last post within the SoftStop® System are curved. (p. 16)
- Ensure the center of the SYTP® yielding holes are approximately centered at finished grade line for Post 1 & 2. (p. 25)
- Ensure the fully assembled SoftStop® Anchor Post (Post 0) has a maximum height of 4" [102 mm] and a minimum height of 3 3/4" [96 mm] above finished grade line. (p. 21)
- Ensure that the SoftStop® Anchor Rail is not bolted to Post 2 (SYTP®). (pp. 30-31)
- Ensure 8" [203 mm] composite offset blocks are properly in place and not damaged or rotated. (pp. 26-27)
- Ensure that the SoftStop® System Rail height is approximately 31" [787 mm] above the finished grade. (p. 6)
- Ensure rails are lapped in the direction of traffic immediately adjacent to the installation. (pp. 28-31)
- Ensure the SoftStop® Impact Head Connection Bracket is attached to the front side of SoftStop® Post 1 (SYTP®) with required 5/16" hardware. (p. 34)
- Ensure SoftStop® Impact Head has no more than 3 1/2" [89mm] of upward tilt. (p. 22)
- Ensure the SoftStop® Anchor Paddle is installed on top of the SoftStop® Anchor Rail and the two (2) 3/4" bolts utilized are installed from the bottom of the SoftStop® Anchor Rail. (pp. 33 and 36)
- Ensure that the SoftStop® Keeper Plate and Plate Washer are properly positioned with required hardware. (p. 37).
- Ensure the 1" Hex Nut has been fully tightened against the SoftStop® Plate Washer. (p 37)
- Ensure that both SoftStop® Anchor Angles are properly positioned. (p. 38)
- Ensure the SoftStop® Angle Strut is properly attached on the non-traffic side with the "toe" of the vertical leg down. (p. 38)
- Ensure that all fasteners of the SoftStop® System are tightened to a snug position with a minimum of two threads protruding beyond the nut.
- Ensure delineation is placed on SoftStop® Impact Head Strike Plate per MUTCD and/or state/specifying agency. (p. 39)
- Ensure any steel delineator posts are a minimum of 6" from the front of Post #0. (p. 39)

# Repair Inspection Checklist (File With Maintenance Records)

Performed by: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

- Ensure required traffic control is in place to conduct SoftStop® System repair. (p. 5)
- Ensure only Trinity Highway SoftStop® System parts are used for the repair of the SoftStop® System and that all parts are free of damage. (p. 5)
- Ensure proper site grading complies with state/specifying agency guidelines or AASHTO Roadside Design Guide, whichever is more stringent. (p. 14)
- Ensure that soil around all posts is properly compacted and posts are free to rotate. When leave-outs are necessary, use only state/specifying agency approved backfill material within the leave-out area. (p. 19)
- Ensure SoftStop® System offset does not exceed max allowed by test level and radii. (pp. 16-17)
- Ensure no rail panels, between Post 0 and last post within the SoftStop® System are curved. (p. 16)
- Ensure the center of the SYTP® yielding holes are approximately centered at finished grade line for Post 1 & 2. (p. 25)
- Ensure the fully assembled SoftStop® Anchor Post (Post 0) has a maximum height of 4" [102 mm] and a minimum height of 3 3/4" [96 mm] above finished grade line. (p. 21)
- Ensure that the SoftStop® Anchor Rail is not bolted to Post 2 (SYTP®). (pp. 30-31)
- Ensure 8" [203 mm] composite offset blocks are properly in place and not damaged or rotated. (pp. 26-27)
- Ensure that the SoftStop® System Rail height is approximately 31" [787 mm] above the finished grade. (p. 6)
- Ensure rails are lapped in the direction of traffic immediately adjacent to the installation. (pp. 28-31)
- Ensure the SoftStop® Impact Head Connection Bracket is attached to the front side of SoftStop® Post 1 (SYTP®) with required 5/16" hardware. (p. 34)
- Ensure SoftStop® Impact Head has no more than 3 1/2" [89mm] of upward tilt. (p. 22)
- Ensure the SoftStop® Anchor Paddle is installed on top of the SoftStop® Anchor Rail and the two (2) 3/4" bolts utilized are installed from the bottom of the SoftStop® Anchor Rail. (pp. 33 & 36)
- Ensure that the SoftStop® Keeper Plate and Plate Washer are properly positioned with required hardware. (p. 37)
- Ensure the 1" Hex Nut has been fully tightened against the SoftStop® Plate Washer. (p. 37)
- Ensure that both SoftStop® Anchor Angles are properly positioned. (p. 38)
- Ensure the SoftStop® Angle Strut is properly attached on the non-traffic side with the "toe" of the vertical leg down. (p. 38)
- Ensure that all fasteners of the SoftStop® System are tightened to a snug position with a minimum of two threads protruding beyond the nut.
- Ensure delineation is placed on SoftStop® Impact Head Strike Plate per MUTCD and/or state/specifying agency. (p. 39)
- Ensure any steel delineator posts are a minimum of 6" from the front of Post #0. (p. 39)

# Routine Inspection Checklist (File With Maintenance Records)

Performed by: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

**Trinity Highway recommends the appropriate highway authority develop and administer their own end terminal inspection program, based on location of unit, volume of traffic and impact history.**

**Important: The SoftStop® System and all of its components shall be inspected for damage after every impact. Repair using only Trinity Highway parts that are specified for use within the SoftStop® System.**

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IF no end terminal inspection program exists, Trinity Highway recommends visual drive-by inspections at least once every month and walk-up inspections every six (6) months. These inspections shall, at a minimum, consist of:

## Visual Drive-By Inspections (Recommended Frequency: Monthly)

- Check for damage caused by vehicle impacts.
- Check for damage caused by impacts from snowplow, mowing or roadway operations.
- Check for misalignment.
- Check for missing system components.
- Check for vandalism.
- Check for damage caused by adverse weather conditions (i.e. erosion, weight of snow, UV).

## Walk-Up Inspections (Recommended Frequency: Every Six (6) Months)

Walk-Up Inspections shall include ALL Visual Drive-By Inspection items (listed above) as well as the items listed below.

- Ensure required traffic control is in place to conduct walk-up inspection.
- Clear and dispose of any debris or trash found on the SoftStop® site, which may interfere with the performance of the SoftStop® System.
- Check that fasteners are fully tight and a minimum of two (2) bolt threads are protruding beyond the nut.
- Check for erosion to the site grading around the system.
- Ensure the height of the system is being maintained at 31" from finished grade.

If any of the above items are identified during the inspection process, swift action shall be taken to correct and return the SoftStop® System to proper condition outlined in the SoftStop® System assembly manual, latest edition.