



# RECALL

## R24DC: FMVSS 221 Noncompliance: Joint Strength – Insufficient Roof Rivet Quantity

**Models Affected:** Certain 2019-2023 Vision and All American buses

**Issue:** On certain units, the roof sheet rivet spacing may be incorrect in some segments, resulting in noncompliance with FMVSS 221, School Bus Body Joint Strength.

**Corrective Action:** Inspect the rivet spacing at each roof sheet joint and install additional rivets, as required by specification.

**Parts/Items Needed:**

Item Number	Part Number	Description	Quantity
1	10052610	FASTENER,HUCK,.25 BLIND,MAGNALOK,MGLP-R8-ES	12 (Approximately)
2	NA	*RIVET SPACING TEMPLATE	1

\*Rivet spacing template will be included in the dealer/owner letters sent in the US mail.

**[WARNING]** This procedure requires working from ladders or scaffolds to reach the top of the bus. Observe all safety precautions to secure the bus from rolling and for use of ladders or scaffolds. Thoroughly read and understand all instructions before performing these procedures. Park bus on level surface, apply parking brake, turn off ignition key, and **chock wheels**.

Instructions

1. On one side of the bus, starting at either the front or the rear, go to the first roof panel joint seam of double rivets. These will be the rivet rows that need to be inspected.
2. Use a ladder or scaffold that will allow access to the roof of the bus.





3. Inspect rivet spacing at each roof sheet joint. Roof sheet joints are assembled with two rows of rivets. Joint must have a minimum of six rivets in an eight inch segment. The full length of the roof sheet joint, including the top of the bus, must be inspected and corrected, if needed.
  - a. Place the supplied rivet spacing template over the joint and parallel to the edge of the roof sheet, allowing roof rivets to be exposed through the opening in the template, as shown.
  - b. Move the template from one side of the roof sheet towards the center of the roof.
  - c. If a segment in the roof joint contains less than six rivets, additional rivets are required. Mark each area that requires additional rivets.
  - d. If one rivet is required; add a rivet equally spaced between the two rivets with the largest space in this section.
  - e. If additional rivets are required; add additional rivets between the largest spaces until a minimum of six (6) rivets have been added in the eight (8) inch segment.
4. Using a short 17/64" drill bit, drill a hole through the roof sheet and bow flange only. **Be sure not to drill through the inside headliner.** Drill any required holes on a common centerline with existing rivets.
5. Install rivet (Item 1) in each drilled hole.
6. With the correct color paint, touch up each blind rivet installed.
7. Repeat procedure on the opposite side of the bus.