



Field Service Bulletin
CNG System Rubber Bumpers
for DART

ENP-600
July 26, 2017

1. Introduction

This service bulletin describes the installation of rubber bumpers to address vibration noise on Dallas Area Rapid Transit (DART) 40- and 31-foot CNG-fueled buses made by NABI Bus, LLC and equipped with Agility Fuel Solutions systems mounted on the vehicle roof.

Warning Statements Used in this Document

WARNING

Personal injury or death may occur if procedures are not followed.

CAUTION

Damage to equipment, fuel system or vehicle is possible if instructions are not followed.

2. Affected Units

This procedure applies to Agility Fuel Solutions systems 23905000 (40-foot) and 23906000 (31-foot) CNG-fueled buses supplied to NABI Bus, LLC for Dallas Area Rapid Transit (DART).

3. Corrective Action

Fasten new rubber bumpers on roof mount chassis structure. Adjust as necessary.

4. Tools, Materials, Parts Needed

- Standard hand tools and PPE
- Drill for 5/16-18 fastener (11/32-in. to 3/8-in.)

The following parts are needed. Quantities are for one vehicle.

QTY	DESCRIPTION	PART NUMBER
56	Rubber bumpers, stud 5/16-18 thread, 1-1/2-in. long	10702283
As needed	Rubber strips, comes in rolls	10802111
56	5/16-18 Nuts and lock washers	--

⚠ WARNING ⚠ CAUTION

- A. Wear appropriate personal protective equipment (PPE) and fall arrestment gear when servicing roof-mounted systems.
- B. Always be mindful of high pressure plumbing while working on the fuel system.

5. Procedure

1. It is not necessary to depressurize the system.
2. The existing rubber strips can remain in place. If sections of rubber strips are missing, they should be replaced.
3. Refer to Figures 1 to 6. Drill holes for the rubber bumpers.
 - a. Spacing is approx. every 18 to 24 inches between bumpers, center-to-center.
 - b. A template can be used to simplify the layout and drilling.
 - c. **Indicated in red in Figure 1:** The transverse members (perpendicular to the cylinders) on the upper frame do NOT require the rubber bumpers.
 - d. **Indicated in dark blue in Figure 1:** The middle section of frame is a “back-to-back” channel. Drill holes as indicated on the jig.
 - e. **Indicated in yellow in Figure 1:** Drill holes for the rubber bumpers using the jig.
4. Refer to Figure 6. Place the rubber bumper over top of the existing flat rubber, install washer and nut under the channel rail to secure bumper.
5. Additional washers may be inserted between the bumper and the existing flat rubber to raise the bumper if needed. This is only required if there are gaps greater than 1/8-in. between the cover and the top surface of the bumper.
6. The bumpers should be visually inspected for wear or damage once per year, or when routine maintenance is performed.

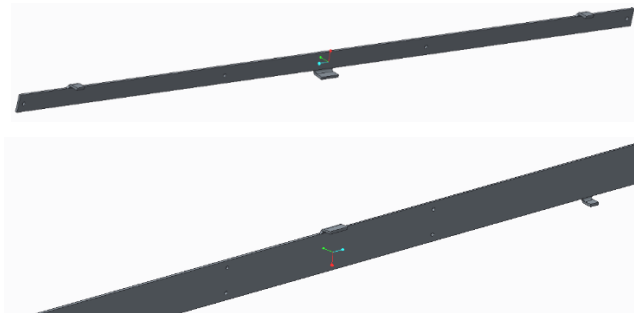


Figure 1 Jigs simplify drilling holes for the bumpers.

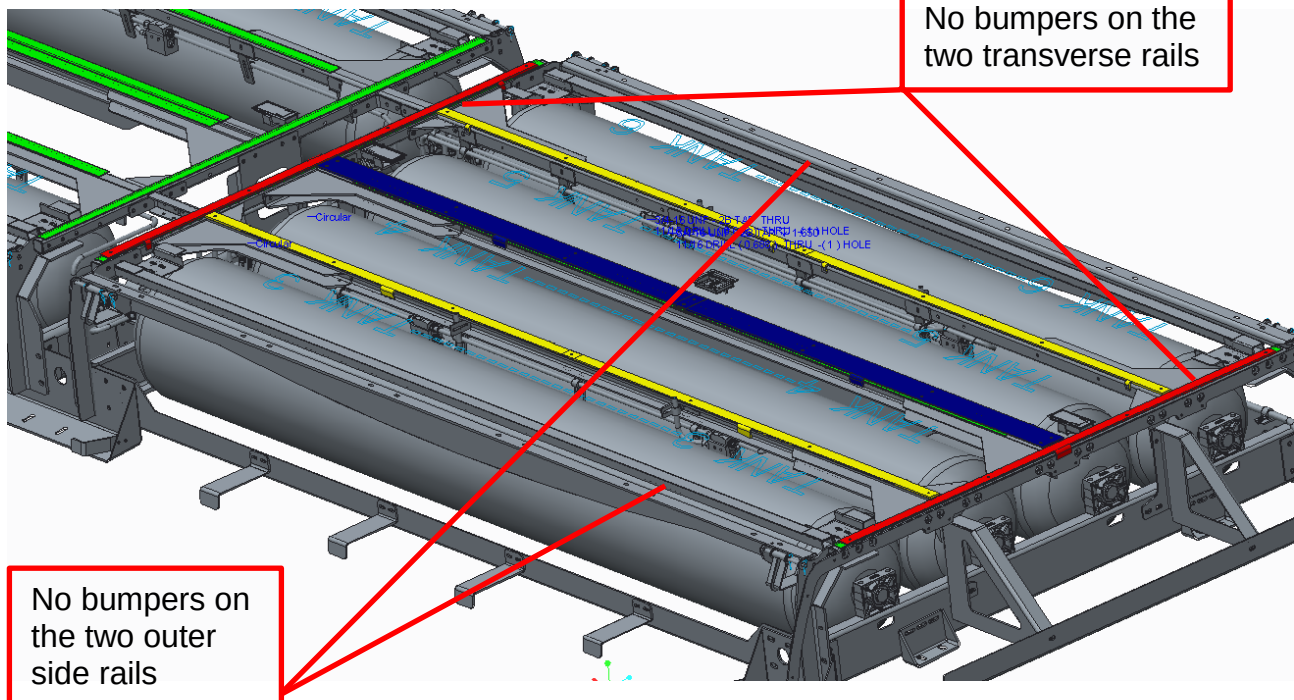


Figure 2 The rubber strips can be left in place. Rubber bumpers are installed over the rubber strips along the rails indicated in blue and yellow.

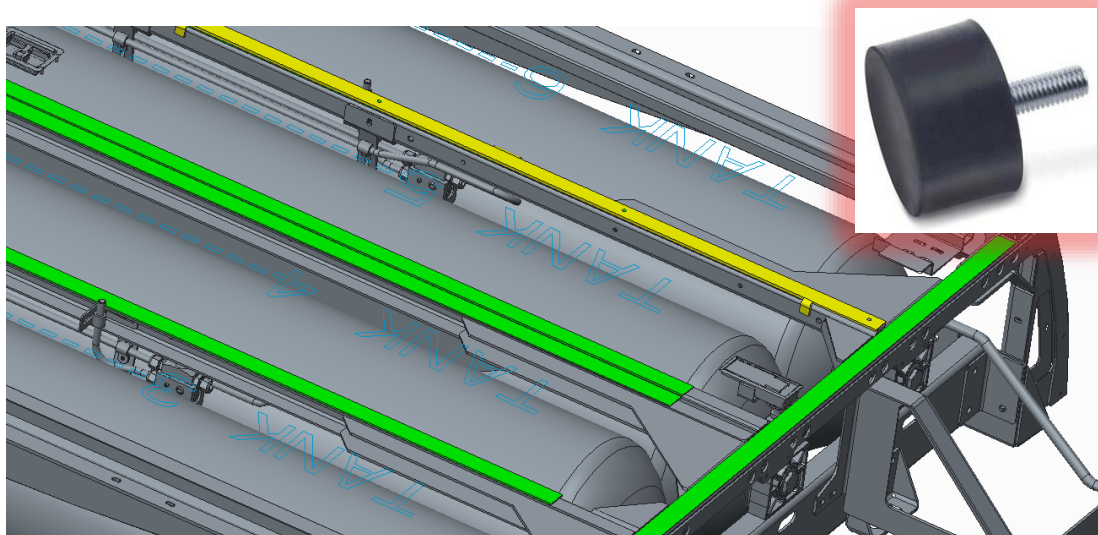


Figure 3 Rubber bumpers are installed on steel structure at regular intervals. Jigs simplify this task. A rubber bumper is shown in the upper right.



Figure 4 Holes are drilled at approx. 18-in. to 24-in. center-to-center. Note: This is a mock-up system, actual vehicle rails and cylinder locations may differ.

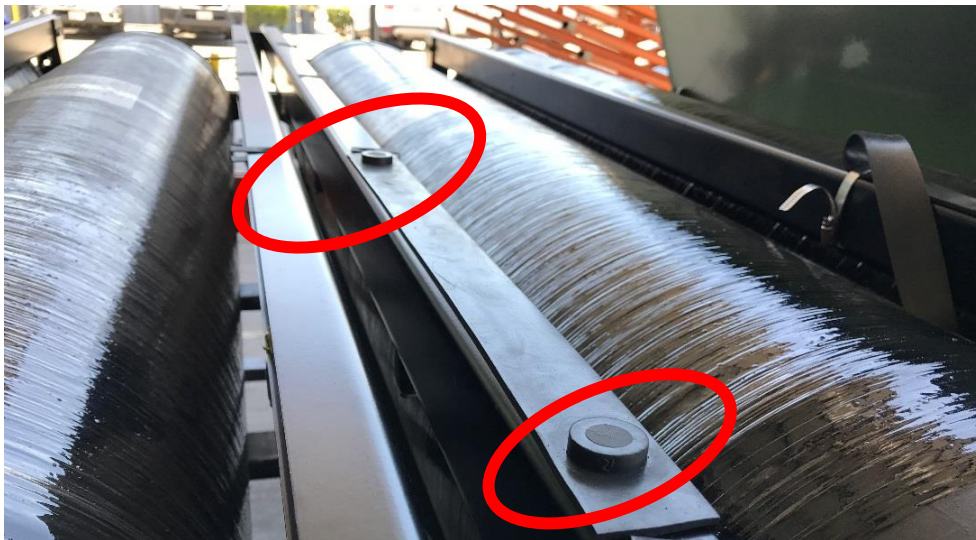


Figure 5 Rubber bumpers bolted into place on the rail on the right. Rubber bumpers will be mounted on the rail on the left next. Note: This is a mock-up system, actual vehicle rails and cylinder locations may differ.

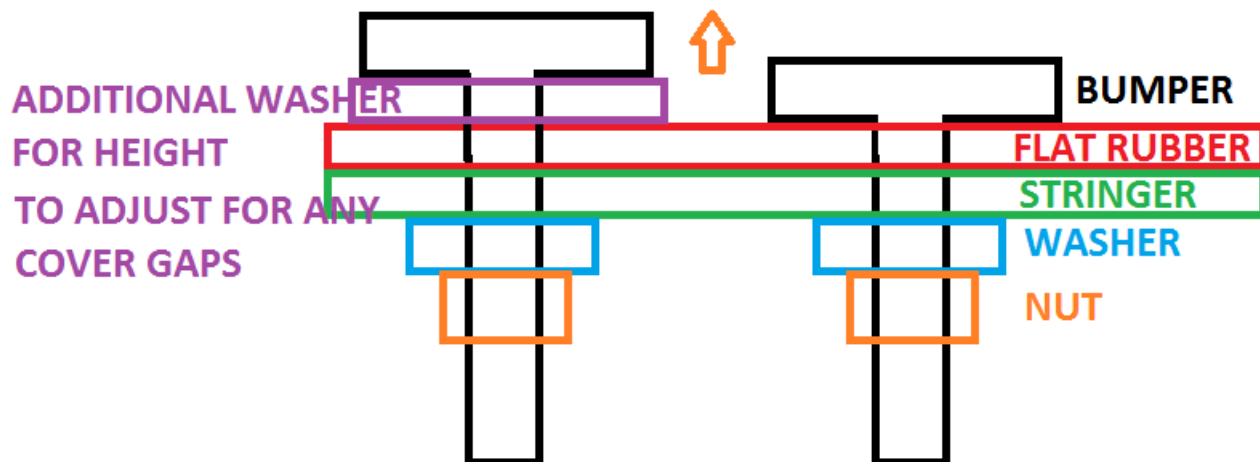


Figure 6 Illustration showing the "stack up" of rubber bumper, flat rubber strip, frame stringer, washer and nut.

6. Warranty Information

Note: This modification is covered by our standard warranty: 12 months. Standard repair time (SRT) is 2 hours per vehicle.

If you have any questions, contact Agility Fuel Solutions Customer Care: 949-267-7745, toll free: 855-500-2445 or support@agilityfs.com.

Proprietary Statement

The information provided within this document is proprietary and confidential. All prior versions, including updates and revisions forwarded separately, are proprietary. The information provided by Agility Fuel Solutions to its customers and clients is solely for the use of those customers and clients. No portion of this manual may be reproduced or distributed without express written consent of Agility Fuel Solutions. Agility Fuel Solutions reserves the right to utilize the intellectual property contained within this publication as content for any other publication produced by Agility Fuel Solutions.

Trademark Notice

Agility® and TUFFSHELL® are registered trademarks of Agility Fuel Solutions. Drop-N-Go™ is a trademark of Agility Fuel Solutions. Trademarks of other manufacturers are the property of their respective companies.

Agility Fuel Solutions | 3335 Susan Street Suite 100 | Costa Mesa, CA 92626 USA
www.agilityfuelsolutions.com



Revision	Description	Author	Approved By	Date
--	Initial release	W. Yoshida	See below	7/26/17

Jason Laycock	Marc Meyer	Kurt Nielsen			Chris Forsberg	Adam Robertson
