



U.S. Department  
of Transportation

**Federal Transit  
Administration**

Chief Counsel

1200 New Jersey Avenue, SE  
Washington, DC 20590

**JUN - 8 2017**

Mr. Kish Johnson  
Corporate Sales Associate  
FR Conversions Inc.  
1231 Tech Ct  
Westminster, MD 21157

Re: Final Assembly Determination

Dear Ms. Johnson:

I write in response to your April 3, 2017, request for a determination by the Federal Transit Administration (“FTA”) as to whether the process that FR Conversions (“FRC”) undertakes to convert minivans, such as the Dodge Caravan, into wheelchair-accessible vehicles are sufficient to meet the Buy America requirements for final assembly under 49 C.F.R. § 661.11. For the reasons set forth below, I find that FRC’s conversion processes consist of sufficient manufacturing activities to conclude that these activities meet the final assembly requirements under 49 C.F.R. § 661.11.<sup>1</sup>

#### **I. FRC’s Final Assembly Processes**

FRC has a 155,000-square foot production facility located in Westminster, Maryland, where its conversion processes take place. In 2015, FRC converted 2,000 Dodge and Chrysler minivans at that production facility and hope to double that number of conversions by the end of 2017. Per FRC, the conversion process is divided into four parts: (1) Tear-Down; (2) Weld-in; (3) Finishing; and (4) Exhaust, Test-Drive, Final Inspection. Aside from the fourth stage, which is a final cleaning and testing of the finished product, each of the three prior stages involves multiple activities that substantially transform the original minivan into a wheelchair-accessible minivan and are completed at the Maryland facility.

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<sup>1</sup> This determination is limited to the final assembly requirements under Buy America for rolling stock. It does not cover the requirement that the cost of components produced in the United States meets the domestic content percentage in the Buy America statute. 49 U.S.C. § 5323(j)(2)(C)(i); 49 C.F.R. § 661.11(a). When calculating domestic material cost and whether it meets the specified threshold, the percentage of a specific component can only be determined by calculating the total costs of all of the components, i.e., the components provided in both lists. Also, please note that the cost of the final assembly activities may not be included in the calculation of the domestic content. 49 C.F.R. § 661.11(q).

- The “Tear-Down” process includes: removing the exhaust and fuel systems; rewiring the vehicle and disconnecting the battery; removing molding, panels, carpeting, seats, rear gasket, bumper covers, and the bumpers; grinding down the frame rails, and welding frame rails.
- The “Weld-In” phase includes: installing brackets, tub assembly, and frame rail reinforcements; removing grab bars; dropping the axle; welding and installing components for the frame rail; installing and welding seats, suspension reinforcement; installing the suspension system and fuel tank bolts; welding various plates; raising the axle; welding and installing the sway bar and Q-strait plates.
- The “Finishing” process entails coating the interior and exterior; grinding, sanding, and painting; coating all surfaces; reconnecting the battery, reinstalling seats, flooring, and carpeting; attaching the ramp; assembling the fuel tank; reinstalling the bumpers; and equipping the vehicle with a Q-strait harness.

Based upon the information provided above, FRC asserts that its conversion activities are sufficient to meet FTA’s Buy America regulations at 49 C.F.R. § 661.11 and Appendix D, and is requesting confirmation from FTA.

## **II. Buy America**

### **A. Legal Requirements for Buses and Railcars**

Under 49 U.S.C. § 5323(j)(1), FTA may not obligate funds for a project unless the steel, iron, and manufactured goods used in a project are produced in the United States. For rolling stock procurements, this requirement does not apply if the cost of the components and subcomponents produced in the United States is more than 60 percent of the cost of all components and final assembly takes place in the United States.<sup>2</sup> 49 U.S.C. § 5323(j)(2)(C); 49 C.F.R. § 661.11(a). Final assembly is defined as “the creation of the end product from individual elements brought together for that purpose through application of manufacturing processes.” 49 C.F.R. § 661.11(r).

To comply with Buy America, final assembly must take place in the U.S. As stated in Appendix D to Section 661.11, the minimum requirements for final assembly of transit rolling stock include:

In the case of a new bus, final assembly would typically include, at a minimum, the installation and interconnection of the engine, transmission, axles, including the cooling and braking systems; the installation and interconnection of the heating and air conditioning equipment; the installation of pneumatic and electrical systems, door

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<sup>2</sup> Effective October 1, 2015, the domestic content for rolling stock was increased from the current rate of more than 60 percent to more than 65 percent in FY2018 and FY2019 and more than 70 percent in FY2020 and beyond. For more information about FTA’s implementation of the phased increase in rolling stock, please consult FTA’s Policy Guidance Statement issued on September 1, 2016. 81 FR 60278 (Sept. 1, 2016). This document is available on FTA’s website at: <https://www.transit.dot.gov/regulations-and-guidance/buy-america/buy-america-policy-statements>.

systems, passenger seats, passenger grab rails, destination signs, wheelchair lifts; and road testing, final inspection, repairs and preparation of the vehicles for delivery.

Because these requirements constitute the typical final assembly requirements for conventional transit buses and do not specifically address the processes involved in converting a minivan for Americans with Disabilities Act accessibility, paragraph (c) of Appendix D permits a vehicle manufacturer to request an FTA determination of its compliance with the final assembly requirement, which FTA will conduct on a case-by-case basis.

### **B. Final Assembly Requirements for Minivans**

For the most part, FTA addresses only the typical final assembly requirements for buses and rail cars in its regulations and guidance documents, but generally does not cover minivans. *See, e.g.*, 49 C.F.R. § 611.11 app. D. With respect to wheelchair-accessible minivans that use a slide-door ramp, FTA has found that the following conversion activities collectively constitute final assembly as required by 49 C.F.R. § 661.11(a) and (r):

- (a) “Strip-Out”: consists of “removal of the front and rea[r] seating components ... interior wall and door panels, and all carpeting.”
- (b) “Seat Re-Engineering & Modifications”: consists of “remanufactured [front seats] to be easily removable for wheelchair access” and rear seats are “modified to permit forward folding for access to a kneeling system linear actuator and a proprietary vehicle slide door/ramp controller.”
- (c) “Subsystem Re-Engineering & Modifications”: installing new, longer, reconfigured rear brake, fuel, heat, and air conditioning and fuel lines.
- (d) “Fuel Tank System Re-Engineering & Modifications”: removal of the original fuel tank and charcoal canister from its mid-vehicle location, rotated, relocated, and reinstalled to aft of the rear axle location. The original fuel fill pipe assembly is removed and discarded and a “new, reconfigured fuel pipe assembly is installed to meet the relocated and rotated fuel tank.”
- (e) “Fabrication of Lowered Floor Unit Body”: fabrication of a new low floor unit body.
- (f) “Floor Re-Engineering & Modifications”: removal of the Original Equipment Manufacturer (OEM) floor and undercarriage from the toe pan to the rear axle, adding of a new aft rear axle fuel tank support structure, a new kneeling system actuator housing and structure, a new spare tire/storage tub, and a new lowered floor structure, and various body work to accommodate the new lowered floor structure.
- (g) “Exhaust Re-Engineering & Modifications”: removal of the heat shields, and installing a new reconfigured exhaust pipe, hanger brackets, and muffler.
- (h) “Engine/Transmission/Front Suspension Assembly Modifications”: disconnection from the vehicle and removed, but with the engine lines and hoses left attached. Modifications are made to the engine/transmission/front suspension assembly, such as adding various types of spacing brackets, custom steering shaft extension, and two engine cradle safety bracket tube extensions. The engine/transmission/front suspension assembly is then reinstalled. In addition, a

CARB compliant fuel system is installed, and the exhaust system and heat shields are installed as well.

- (i) “Slide Door Re-Engineering & Modifications”: removal of the slide doors and modifications made to accommodate a lowered floor/wheelchair ramp entrance. The doors are then reinstalled.
- (j) “Rear Axle & Suspension Re-Engineering & Modifications”: removal, modifications done to the sway bar mounting, and coil spring mounts, addition of a kneel chain bracket, and reinstallation of the rear axle.
- (k) “Flooring & Walls”: installation of a marine grade flooring substrate and covering and carpet or plastic panels with carpeted inserts. Walls are covered with new interior panels and trims.
- (l) “Rear Bumper Re-Engineering & Modifications”: involves removal of the rear bumper, reinforcing the rear bumper, and reinstalling it.
- (m) “Wiring Re-Engineering & Modifications”: reconfiguration of the seating systems and airbag systems, and modifications to accommodate the wheelchair ramp system, slide door operation, kneel function, and other accessibility modifications.
- (n) “Ramp”: installation of the manual or power wheelchair ramps.
- (o) “Paint & Undercoat”: newly installed components are painted and the entire floor is undercoated.
- (p) “Miscellaneous”: Among other things, the vehicle is inspected, weighed, and recertified by [the wheelchair minivan conversion manufacturer].<sup>3</sup>

### III. Discussion

Based on a careful review of FRC’s activities at the Westminster, Maryland facility and a comparison of the final assembly activities undertaken by similar minivan conversion companies, I conclude that FRC satisfies the Buy America final assembly requirements of 49 U.S.C. 5323(j)(2)(C)(ii) and 49 CFR 661.11.

FRC makes substantial changes to the interior and exterior of the minivan, including, among other things, adding a wheelchair ramp, installing a new lowered floor, and making modifications to and reinstalling the fuel system, suspension, and exhaust system. These activities result in an FRC minivan – a new and significantly different vehicle from the Dodge minivans. Accordingly, FRC’s manufacturing activities in the United States at its Maryland facility are sufficient to meet the final assembly requirements under 49 C.F.R. § 661.11(a) and (r), as a minivan that is converted for wheelchair accessibility.

### IV. Conclusion

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<sup>3</sup> Memorandum from Dorval R. Carter, Jr., Chief Counsel, FTA, on the determination as to whether the process by which the Braun Corporation (Braun) converts incomplete Chrysler minivans into Braun Entervans satisfies FTA’s Buy America requirements for final assembly to Peter M. Rogoff, Administrator, FTA 2-3 (June 28, 2013); see also Memorandum from Dorval R. Carter, Jr., Chief Counsel, FTA, on the determination as to whether the process by which EIDorado National-Kansas (EIDorado) converts incomplete Chrysler and Dodge minivans into EIDorado Amerivans satisfies FTA’s Buy America requirements for final assembly to Peter M. Rogoff, Administrator, FTA 2-3 (June 28, 2013).

Based upon the foregoing, I find that FRC's manufacturing activities meet the final assembly requirements under 49 C.F.R. § 661.11. This decision is limited solely to minivans that are converted for wheelchair accessibility by FRC and based upon FRC's asserted final assembly processes described herein. Deviation from these described processes may result in a different conclusion. Lastly, this decision does not cover the domestic content requirement under 49 U.S.C. § 5323(j)(2)(C)(i) and 49 C.F.R. § 661.11.

If you have any questions regarding this determination, please contact Richard Wong at (202) 366-0675, [Richard.Wong@dot.gov](mailto:Richard.Wong@dot.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Dana C. Nifosi". The signature is fluid and cursive, with the first name "Dana" being the most prominent part.

Dana C. Nifosi  
Acting Chief Counsel