

AMF-BRUNS

INSTALLATION MANUAL: VEHICLE SPECIFIC

eFUTURE**SAFE** Head & Backrest / Seatbelt Anchorage



eFUTURE**SAFE**



⚠ WARNING ⚠

Carefully read, understand and follow all warnings and instructions provided in this manual, and keep it in a safe place for future reference. If you have any doubt whatsoever regarding the use or maintenance of any AMF-BRUNS product, please contact AMF-BRUNS. Failure to follow these warnings and instructions can result in product malfunction or loss of control of the vehicle, causing an accident, severe personal injury or death. This guide contains current information at the time of printing. AMF-Bruns reserves the right to modify systems or content without notice. Please visit our website for updated versions.



AMF-BRUNS OF AMERICA

www.amfbrunsamerica.com

REV 11/2018 Part Number: TR-600005



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Foreword

Dear Purchaser:

Thank you for purchasing an AMF-Bruns of America product. Your product has been designed to provide years of safe and dependable service -- as long as it is installed, used and maintained in accordance with the instructions provided in this manual.

All persons who will install, use and/or maintain this product must read, understand and follow all warnings and instructions provided in this manual. This manual should be considered an integral part of your product and should remain with your product. However, nothing in this manual, and none of the safety devices installed on the product, substitute for proper training, careful operation and common sense.

Always be sure that your product is in optimum working order. If you suspect that anything is not working properly, or that a dangerous situation may exist, immediately contact your dealer or AMF-Bruns of America before you proceed.

Keep this Installation Manual in a safe place for future reference over the lifetime of the product. If you sell eFutureSafe, pass this Installation Manual to the new owner.

All details, figures and dimensions contained in this Installation Manual are non-binding. No claims in any form can be derived from this manual. This document must not be reproduced or duplicated, in full or in part, without the prior, written permission of the manufacturer.

eFutureSafe must not be converted or modified in any way without seeking the prior written permission from AMF-Bruns. AMF-Bruns will not be held responsible in any way if conversions or modifications are carried out without proper authorization.

Use only original spare parts or spare parts which have been approved of by AMF-Bruns. If spare parts other than these are used, this can have a negative effect on the specified characteristics, the functionality and safety of eFutureSafe. The use of any other parts will render the warranty null and void. Use caution when removing OEM vehicle parts due to sharp edges. Depending on vehicle type, the installation process may vary.

For any concerns regarding the proper use, installation, maintenance or safety of your product, or if you need to order new products, spare parts or accessories:

- Call your authorized AMF-Bruns of America dealer.
- Contact our AMF-Bruns Customer Service at 1-877-506-3770
- Email: contact@amfbrunsamerica.com
- Visit our website: www.amfbrunsamerica.com

Sincerely,

AMF-Bruns of America



Registration Information

Customer Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____

Serial Number: _____

Model Number: _____

Installation Date: _____

Vehicle Make/Model/Year: _____

Dealership: _____

Technician: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____

Explanation Of Symbol And Signs

1) The following symbols and signage will be used in the Installation Instructions to emphasize safe installation and usage of this product:

Explanation Of Symbol And Signs

1) To improve understanding, the following conventions should be met for this user and installation manual.



DANGER!

Warns of a situation of immediate danger which could lead to serious or fatal injuries if not avoided.



WARNING!

Warns of a potentially dangerous situation which could lead to serious or fatal injuries if not avoided.



CAUTION!

Warns of a potentially dangerous situation, which can lead to slight or minor injuries or material damage if not avoided.



ATTENTION!

Indicates a potentially dangerous situation which can cause material damage if not avoided.



Contains general and useful information.



Reference important information in other sections and documents.

2) Some text passages serve a special purpose. These are highlighted as lists and instructional text, i.e. a series of activities.

3) Meaning of directions: If directions are given in the text (in front of, front, behind, rear, right, left), these directions relate to the normal direction of travel of the vehicle.

1) GENERAL WARNINGS



WARNING!

Failure to follow all warnings and instruction in this manual could cause product malfunction, loss of vehicle control or an accident -- resulting in severe personal injury or death to vehicle occupants, other motorists or pedestrians.

- 1) Throughout this manual, reference is made that an "accident" or "collision" could occur. Any incident such as this can cause severe personal injury or death, or result in property damage.
- 2) The product must be installed and repaired/modified by AMF-Bruns of America or an authorized dealer.
- 3) Read entire manual before using your product.
- 4) Never attempt any adjustment of this product while the vehicle is moving.
- 5) If the vehicle was involved in an impact which resulted in the vehicle being towed away from the scene, the wheelchair tie down and occupant restraint system components (WTORS) and the eFutureSafe Backrest / Seatbelt Anchorage system must be replaced, even if there is no visual damage.
- 6) If you experience any malfunction or questionable operation of this product, **DO NOT USE THE VEHICLE.** Contact AMF-Bruns of America or an authorized dealer for inspection and repair.
- 7) Do not modify any components of the product. This product was designed to operate as a single integrated system. Do not substitute any component with a part supplied by a different manufacturer. Even if they look identical, their performance and operation could be different.
- 8) AMF-Bruns of America provides customers with safe and reliable products. Our product performance is optimized with proper preventative/regular maintenance. To ensure maximum product performance, a maintenance program is beneficial.
- 9) Each installation shall be carefully reviewed and tested by the installer to ensure that the specific application is in compliance with Local, State and Federal regulations.
- 10) Some wheelchairs may not be suitable for use as a seating device in motor vehicles. Refer to the wheelchair owner's manual for the manufacturer's recommendations.
- 11) Airbags should be disconnected if the wheelchair passenger is positioned less than 7" (175 mm) from the airbag module, or if any after-market device is installed so as to block or compromise deployment of the airbag.

2) SAFETY



CAUTION!

Risk of injury if eFutureSafe is not operated correctly.

- It is imperative that this Installation Manual is read thoroughly before operating eFutureSafe.
- Always follow the installation instructions and information.
- If this Installation Manual is lost or becomes illegible, please request a new copy from your authorized dealer or AMF-Brunns of America before you proceed.

Prerequisite to the safe handling and trouble-free operation of eFutureSafe is a thorough knowledge of the applicable safety information and the safety regulations.

It is essential that this manual is read thoroughly before operating eFutureSafe and that the instructions and warnings herein are strictly observed. The safety information and warnings, given at the appropriate places in this manual, must also be strictly observed. The manufacturer will not be held responsible in situations in which safety information and warnings are not adhered.



eFutureSafe Operating Instructions

Contact AMF-Brunns of America for the eFutureSafe Operations Instructions.

2.1 Proper Use

eFutureSafe is designed solely for use in a vehicle as a head-and-back support for a wheelchair user who is driving a vehicle. The driver seated in the wheelchair must wear the seat belts provided in the vehicle. The wheelchair must be secured by the securement system fitted to the vehicle. No bags or other objects must be hanging on the backrest of the wheelchair.



WARNING!

If eFutureSafe is used for any other purpose than that described above, this may result in dangerous situations for persons or material damage.

- Only use eFutureSafe for the purpose for which it was intended: wheelchair mobility.
- Always adhere to information given in this operations manual.
- Do not use eFutureSafe for any other purposes, particularly those given above.
Such actions would be considered to be improper use.

2.2 Improper Use

Any use other than described in Section 2.1, Page 8, is considered to be improper use.

Improper use is if:

- The passenger seated in the wheelchair is not secured by the occupant securements
- The wheelchair is not properly secured inside the vehicle.
- There are bags or other objects hanging on the backrest of the wheelchair.
- eFutureSafe and or the wheelchair is used in a faulty state or with safety-relevant malfunctions.

2.3 Safety and Accident Prevention Regulations

- Only use eFuturesafe for the intended purpose (proper use). Improper use could lead to injuries and material damage. (For proper use: see Section 2.1, Page 8).
- Proper use of eFutureSafe also includes strict adherence to scheduled maintenance intervals and repair work (when needed). If such work is not performed, trouble-free operation can not be guaranteed and could lead to personal injury and material damage.
- eFutureSafe must not be operated in a faulty condition. Doing so could lead to serious injuries. If faults occur, do not use eFutureSafe until repairs have been completed by experienced technicians.
- Use only original spare parts or spare parts which have been approved of by AMF-BRUNS. If spare parts other than these are used, this can have a negative effect on the specified characteristics, the functionality and safety of eFutureSafe. The use of any other parts will render the warranty null and void.

2.4 Disposal

When eFutureSafe's useful life has expired, it must only be disposed by experienced technicians. The manufacturer will accept no liability for damage caused by incorrect disposal.

3) INSTALLATION OVERVIEW

Overview

The purpose of this manual is to provide the instructions necessary for optimum installation, use and maintenance of this AMF-Brunns of America product.

Your AMF-Brunns of America product is to be installed and maintained only by a qualified and trained technician. Never attempt any repairs yourself. Installation must be in accordance with the AMF-Brunns Installation Instructions.

Installation instructions can be downloaded from our website (www.amfbrunsamerica.com).



DANGER!

Risk of injury through incorrect installation.

Incorrect installation of eFutureSafe can create risk of personal injury and material damage during installation and after installation.

- Only use trained technicians to install eFutureSafe.
- Vehicle manufacturer's body fitting guidelines must be followed during installation.



NOTE

eFutureSafe cannot be used until a qualified technician inspects installation to ensure it was done according to AMF-Brunns Installation Instructions.

TOYOTA SIENNA



REMOVAL

1) Remove the driver's seat.

Disconnect electrical connections as needed.

2) Upper Plastic Molding

Remove the upper plastic molding from the B-pillar.



3) Locate and remove the grab handle on the driver's side B-pillar.

Grab handle bolts may be used to fasten eFutureSafe top bracket to the B-pillar.



4) Remove the lock nuts and washers from the M10 T-bolts.

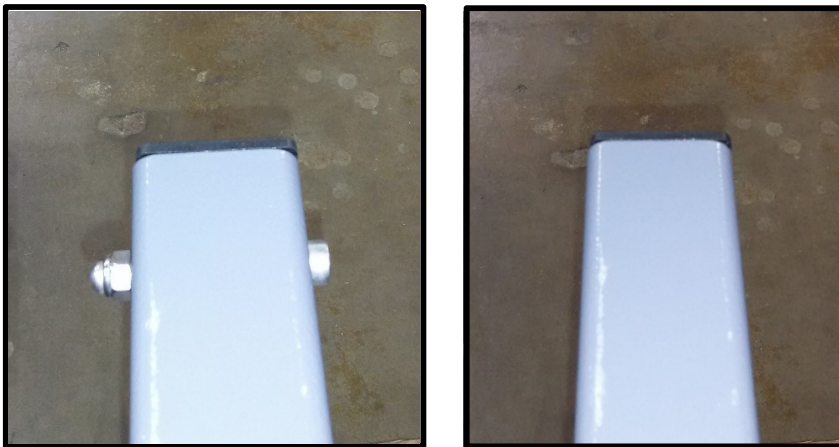
5) Install the two M10 T-bolts into the airline rail located adjacent to the B-pillar.

- May need to remove airline rail to install T-bolts.
- May need to grind down T-bolts as necessary to fit into powdercoated airline rail.

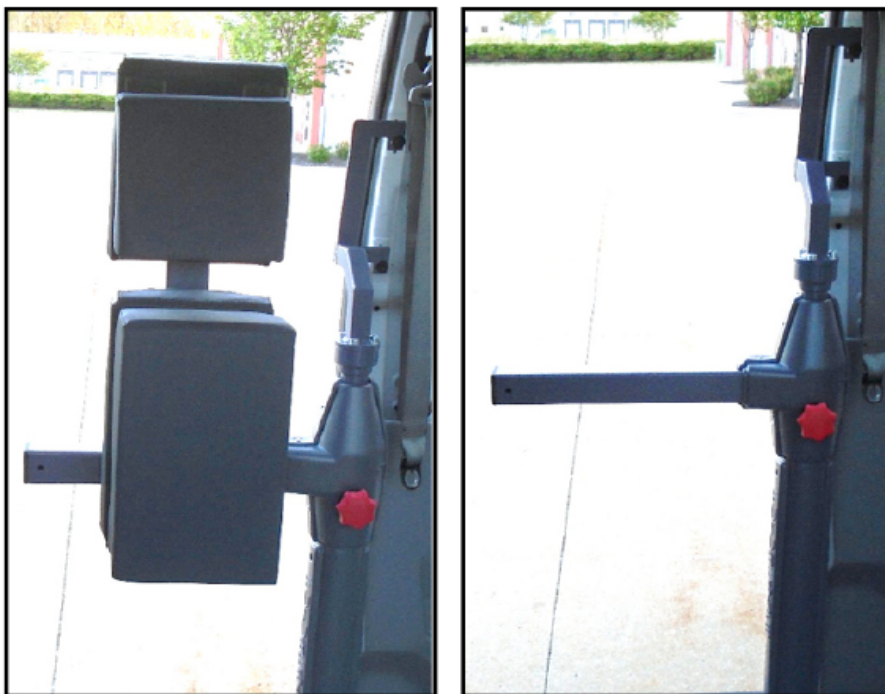


NOTE: Pictures for illustrative purpose only.

6) Remove the bolt, nut and washer from end of horizontal arm.



7) Remove the Head & Backrest assembly from horizontal arm.



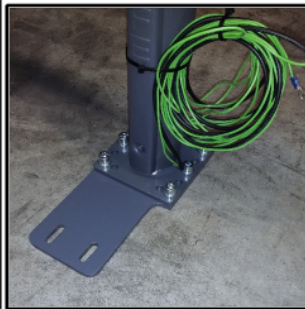
NOTE: Pictures for illustrative purpose only.

INSTALL**1) Using the bolts and washers provided, install the Bottom Bracket onto eFutureSafe main shaft.**

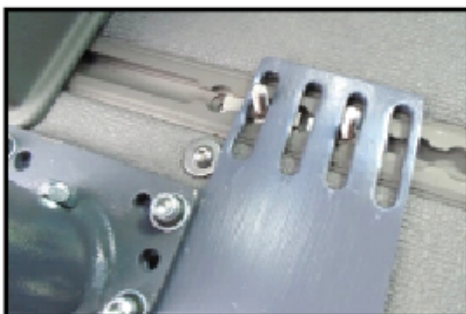
- In the pictures below, note the orientation of the Bottom Bracket and the wires exiting the base of eFutureSafe main shaft.



NOTE: Pictures for illustrative purpose only.

**2) Maneuver eFutureSafe to enable the two slots on the attached Bottom Bracket to fit over the M10 T-bolts as shown.**

- Reinstall the lock nuts and washers onto the M10 T-bolts.
- eFutureSafe wiring exiting the base of eFutureSafe main shaft shall face towards the driver's side, and the slots in the Bottom Bracket shall face towards the front of the vehicle.
- eFutureSafe was shipped in its "driving" position. If the above steps were completed correctly, the horizontal arm should now be perpendicular to the fore-aft axis and pointing towards the passenger side of the vehicle.



NOTE: Pictures for illustrative purpose only.

3) Using the bolts and washers provided, install the Top Bracket onto eFutureSafe main shaft top cylinder adapter.

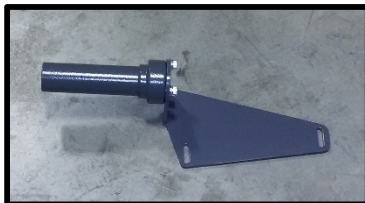
- The main shaft top cylinder adapter can be removed from the top of eFutureSafe.



NOTE: Pictures for illustrative purpose only.

4) Insert the Top Bracket assembly into top of eFutureSafe main shaft as shown.

NOTE: Pictures for illustrative purpose only.



5) Using the two OEM bolts from the grab handle, attach the Top Bracket to the two grab handle holes on the B-pillar.



- If necessary, replace one or both of the OEM bolts with longer bolts (not supplied).
- Adjust the position of eFutureSafe as necessary while ensuring eFutureSafe is as square to the driver's wall as possible.

NOTE: Picture for illustrative purpose only.

6) Finger tighten all fasteners.

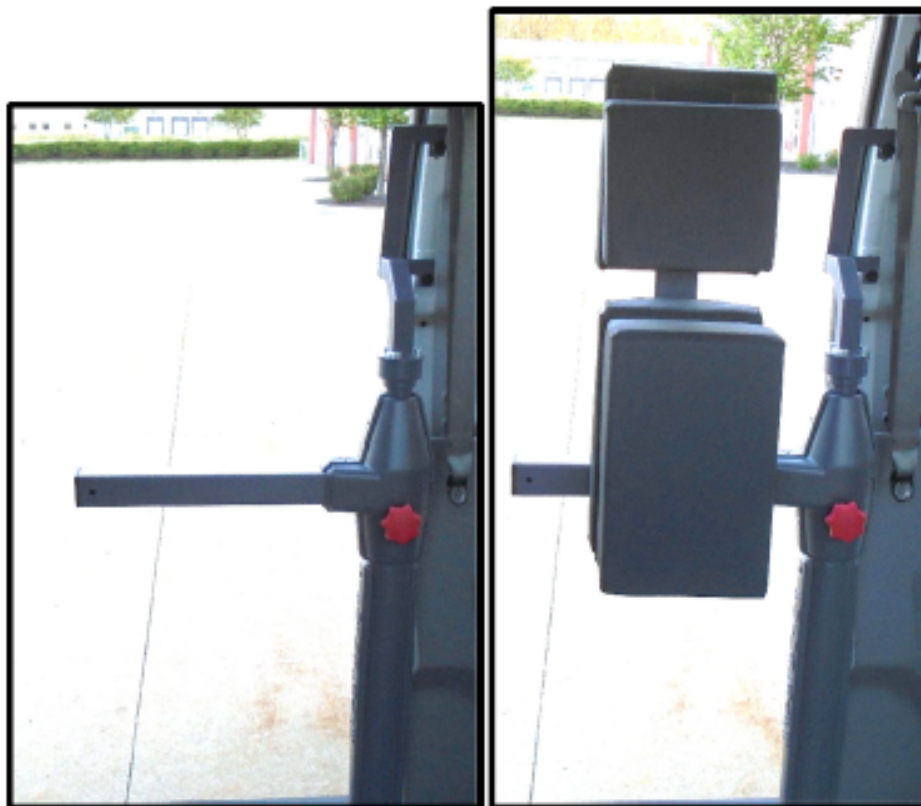
- Note: This is not the final tightening.

8) Ensure eFutureSafe horizontal arm movement zone is clear and test the function of eFutureSafe by actuating the switch.

- The horizontal arm should swing 90° backward towards the “parked” position (parallel to the driver’s side sliding door).
- Actuate the switch again and the horizontal arm should swing 90° forward towards the “driving” position.
- Upon successful completion of the above steps, completely tighten all attachment fasteners.

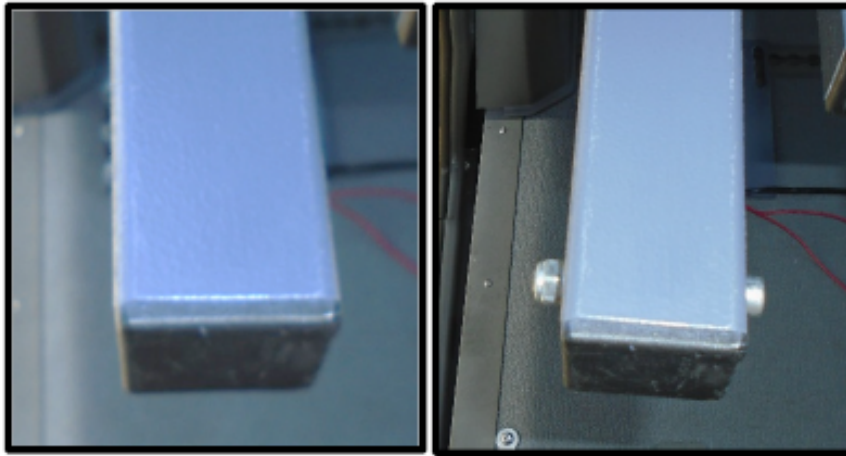
9) Reinstall Head & Backrest assembly onto the horizontal arm.

- Slide the Head & Backrest assembly onto the horizontal arm oriented such that the head and backrest will face towards the driver when eFutureSafe is in the “driving” position.



NOTE: Pictures for illustrative purpose only.

- Reinstall the bolt, nut and washer on end of horizontal arm.



NOTE: Pictures for illustrative purpose only.

- The head and backrests can be adjusted horizontally and vertically to be positioned properly behind the driver.
- Once the desired position is achieved, use the hand knob on the bottom of the Head & Backrest assembly to secure it into the desired position. The upper plastic molding will need to be modified / cut as necessary to fit over the Top Bracket.
- Upon successful modification, reinstall the upper plastic molding.

DODGE GRAND CARAVAN



REMOVAL**1) Remove the driver's seat (if applicable)**

Disconnect electrical connections as needed.

2) Locate and remove the grab handle on the driver's side B-pillar.

The grab handle bolts may be used to fasten eFutureSafe Top Bracket to the B-pillar.



3) Remove the upper plastic molding from the B-pillar.



4) Remove the lock nuts and washers from M10 T-bolts.

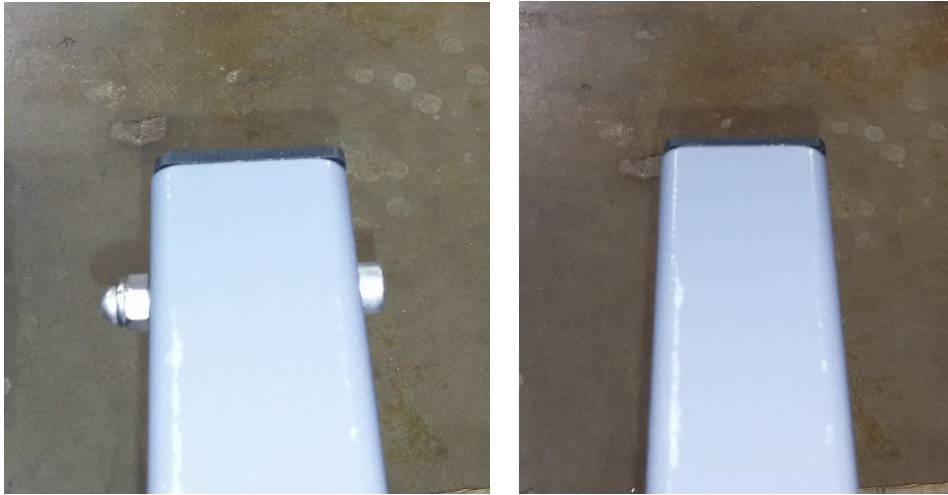
5) Install the two M10 T-bolts into the airline rail located adjacent to the B-pillar.

- May need to remove airline rail to install T-bolts.
- May need to grind down T-bolts as necessary to fit into powdercoated airline rail.

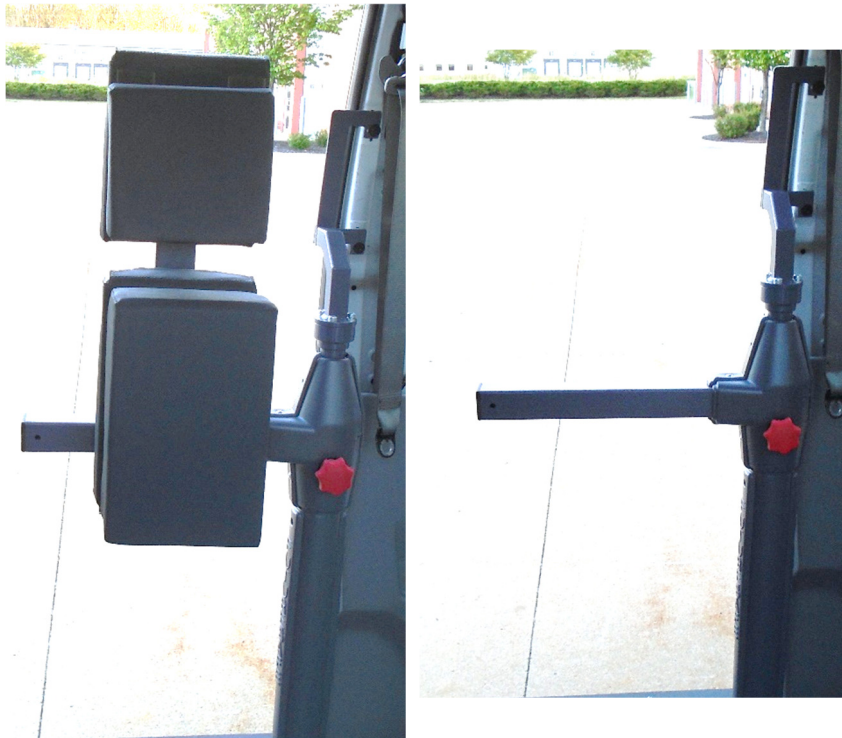


NOTE: Pictures for illustrative purpose only.

6) Remove the bolt, nut and washer from end of horizontal arm.



7) Remove the Head & Backrest assembly from the horizontal arm.



NOTE: Pictures for illustrative purpose only.

INSTALL

1) Using the bolts and washers provided, install the Bottom Bracket onto eFutureSafe main shaft.

- In the pictures below, note the orientation of the Bottom Bracket and the wires exiting the base of eFutureSafe main shaft.

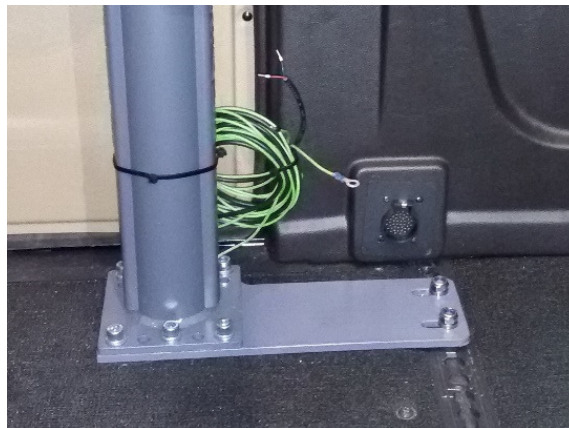
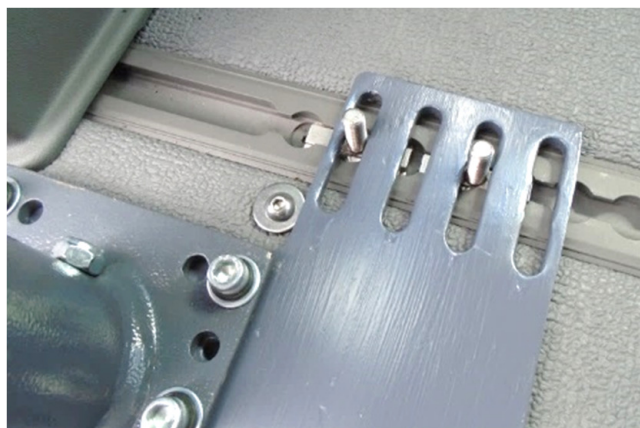


NOTE: Pictures for illustrative purpose only.



2) Maneuver eFutureSafe to enable the two slots on the attached Bottom Bracket to fit over the M10 T-bolts as shown.

- Reinstall the lock nuts and washers onto the M10 T-bolts.
- eFutureSafe wiring exiting the base of eFutureSafe main shaft shall face towards the driver's side, and the slots in the Bottom Bracket shall face towards the front of the vehicle.
- eFutureSafe was shipped in its "driving" position. If the above steps were completed correctly, the horizontal arm should now be perpendicular to the fore-aft axis and pointing towards the passenger side of the vehicle.



NOTE: Pictures for illustrative purpose only.

3) Using the bolts and washers provided, install the Top Bracket onto eFutureSafe main shaft top cylinder adapter.

- The main shaft top cylinder adapter can be removed from the top of eFutureSafe main shaft.



NOTE: Pictures for illustrative purpose only.

4) Insert the Top Bracket assembly into top of eFutureSafe main shaft as shown.

NOTE: Pictures for illustrative purpose only.



5) Using the two OEM bolts from the grab handle, attach the Top Bracket to the two grab handle holes on the B-pillar.

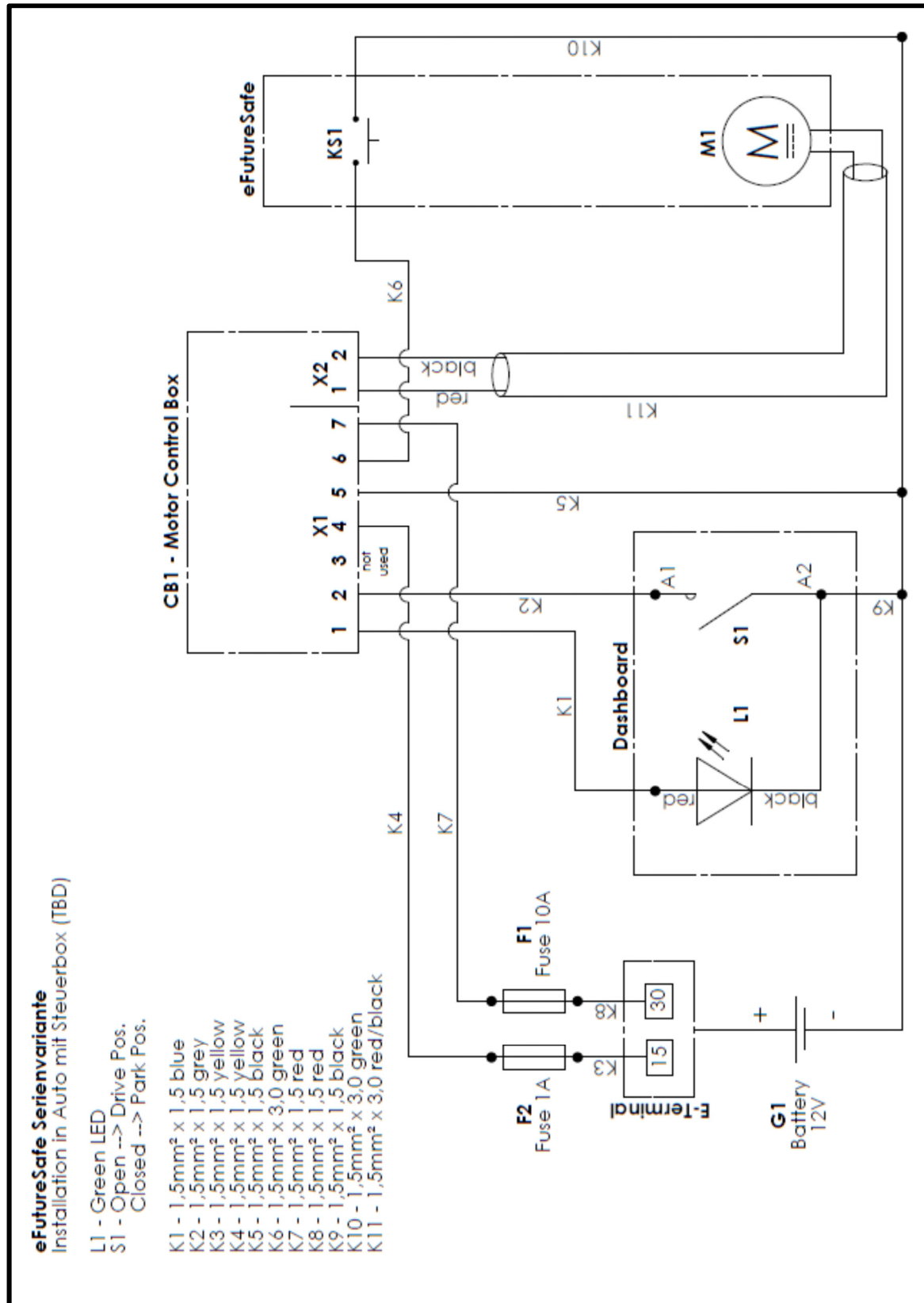


- If necessary, replace one or both of the OEM bolts with longer bolts (not supplied).
- Adjust the position of eFutureSafe as necessary while ensuring eFutureSafe is as square to the driver's wall as possible.

6) Finger tighten all fasteners.

- Note: this is not the final tightening.

7) Install eFutureSafe wiring based on Figure 1 below.



8) Ensure eFutureSafe horizontal arm movement zone is clear and test the function of eFutureSafe by actuating the switch.

- The horizontal arm should swing 90° backward towards the “parked” position (parallel to the driver’s side sliding door).
- Actuate the switch again and the horizontal arm should swing 90° forward towards the “driving” position.
- Upon successful completion of the above steps, completely tighten all attachment fasteners.

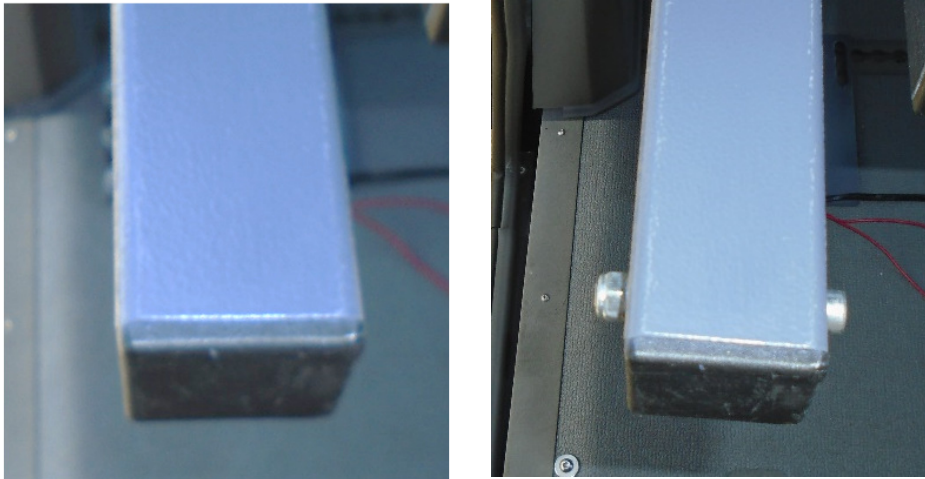
9) Reinstall Head & Backrest assembly onto the horizontal arm.

- Slide the Head & Backrest assembly onto the horizontal arm oriented such that the head and back rests will face towards the driver when eFutureSafe is in the “driving” position.



NOTE: Pictures for illustrative purpose only.

- Reinstall the bolt, nut and washer on end of horizontal arm.



NOTE: Pictures for illustrative purpose only.

- The head and backrests can be adjusted horizontally and vertically to be positioned properly behind the driver. Once the desired position is achieved, use the hand knob on the bottom of the Head & Backrest assembly to secure it into the desired position.
- The upper plastic molding will need to be modified / cut as necessary to fit over the Top Bracket.
- Upon successful modification, reinstall the upper plastic molding.

4) MAINTENANCE / REPAIR

Safety Regulations for Maintenance and Repair



Read the safety information before initiating maintenance and repair work (see Chapter 2, Page 8).



WARNING!
Risk of injury.

There is a risk of injury if:

- eFutureSafe is used after being involved in an accident. It can suffer damage that is not immediately evident, which can impair your safety. The eFutureSafe must be replaced if involved in an accident in which the vehicle was towed.
- Maintenance and repair work is not carried out correctly. Use only a qualified technician for all maintenance and repair work.
- Inferior quality spare parts are used. Use only original spare parts or spare parts which have been approved of by AMF-Bruns. If spare parts other than these are used, this can have a negative effect on the specified characteristics, the functionality and safety of eFutureSafe. The use of any other parts will render the warranty null and void.
- Maintenance must be scheduled and performed at regular intervals.
- Maintenance and repair work that has been performed must be recorded and entered into a maintenance record. This provides a traceable record of maintenance work.



eFutureSafe maintenance and repair must be performed by a qualified technician. Contact AMF-Bruns of America's customer service department for more information (See Chapter 6, Page 33).

5) DE-COMMISSIONING AND CONSERVATIONS

For inquiries regarding De-Commissioning and Conservations, contact our customer services department (See Chapter 6, Page 33).

6) CUSTOMER SERVICE

The AMF-Bruns of America customer service department will be more than pleased to assist in ordering spare parts, maintenance and repair work, and provide assistance with general problems or inquiries.

Reach Us At:

- 1797 Georgetown Road, Hudson, OH 44236
- Email: contact@amfbrunsamerica.com
- Phone: 877-506-3770 or 234-284-2073
- Website: www.amfbrunsamerica.com
- Business Hours:
 - > Monday-Friday: 7-30 am - 4:30 p.m.
 - > Saturday - Sunday: Closed



NOTE

- Warranty work for eFutureSafe must only be performed with the prior agreement of AMF-Bruns of America. The costs of such work will not be accepted by AMF-Bruns without prior agreement.
- This information is not all inclusive and may not cover or represent every installation. For additional information, refer to our website or call AMF-Bruns.

7) DECLARATION OF CONFORMITY



EC Declaration of Conformity

According to EC Machine Directive 2006/42/EC, Annex II A, we, the manufacturer, hereby declare that the design and construction of eFutureSafe complies with the fundamental health and safety requirements of the EC Machinery Directive 2006/42/EC. This declaration is rendered null and void if unauthorized modifications are made to the product.

- **Designation:** Electrically-operated swivelling head-and-back support
- **Product:** eFutureSafe
- **Manufacturer:** AMF-Bruns of America
- **Address:** 1797 Georgetown Road, Hudson, OH 44236
- **Regulations:** Meets all applicable regulations and can withstand 15G rear collision forces and 20G frontal collisions.



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