Competition Engineering C3011

Instruction Manual for Competition Engineering C3011 Fenderwell

Model: C3011

Introduction

This manual provides essential information for the proper installation, use, and maintenance of your Competition Engineering C3011 Aluminum Fenderwell. This product is designed for automotive applications, specifically as a 40-inch aluminum fenderwell component. Please read this manual thoroughly before proceeding with any installation or modification.

Safety Information

Always prioritize safety when working with automotive components. Failure to follow these safety guidelines may result in injury or damage to the product or vehicle.

- Wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and hearing protection, as needed.
- Ensure the vehicle is securely supported on jack stands or a lift before working underneath it.
- Disconnect the vehicle's battery before performing any electrical work.
- Use only tools appropriate for the task.
- Keep work areas clean and well-lit.
- Aluminum components can have sharp edges; handle with care to prevent cuts.
- This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

Parts List

Verify that all components are present and undamaged before beginning installation.

- 1 x Competition Engineering C3011 Aluminum Fenderwell Assembly (consisting of the following):
  - Bands (curved sections)
  - Cheeks (flat end sections)

Image: The complete Competition Engineering C3011 Aluminum Fenderwell assembly, showing the curved bands and flat cheek sections.

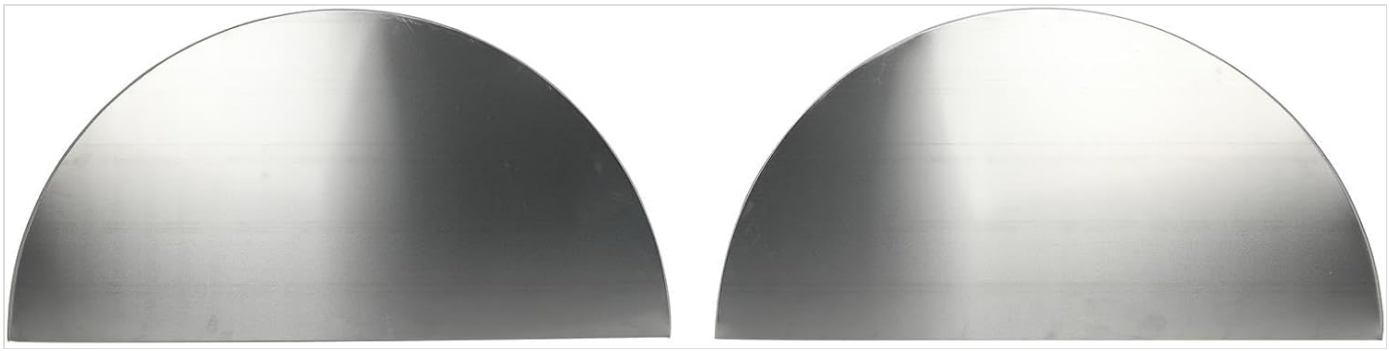


Image: A pair of flat aluminum cheek sections, which form the ends of the fenderwell.

Image: A single curved aluminum band section, featuring multiple reinforcing ribs, which forms the main body of the fenderwell.

Setup and Installation

Installation of the C3011 Fenderwell requires fabrication and welding skills. It is recommended that installation be performed by a qualified professional.

1. **Preparation:** Clean the installation area thoroughly. Ensure all surfaces are free of grease, dirt, and rust.
2. **Fitment:** Carefully position the fenderwell components (bands and cheeks) to determine the optimal fit and alignment within your vehicle's chassis or body structure. This may require custom trimming or shaping of the fenderwell components to match specific vehicle contours.
3. **Marking:** Once the desired position is established, accurately mark the mounting points or welding lines on both the fenderwell components and the vehicle.
4. **Securing:** Temporarily secure the fenderwell in place using clamps or tack welds to verify alignment before final attachment.
5. **Welding/Fastening:** Permanently attach the fenderwell using appropriate welding techniques for aluminum (e.g., TIG welding) or mechanical fasteners (rivets, bolts) as dictated by your specific application and engineering requirements. Ensure strong, secure, and sealed connections to prevent rattles or structural issues.
6. **Finishing:** After installation, inspect all welds or fasteners for integrity. Apply appropriate sealants or coatings to protect against corrosion and moisture ingress, especially in areas exposed to road elements.

Note: This product is a raw aluminum component and typically requires custom fabrication and finishing to integrate into a vehicle. Professional installation is highly recommended.

Operation

As a structural component, the Competition Engineering C3011 Fenderwell does not have operational controls. Its function is passive, providing structural integrity and wheel well enclosure. Once properly installed, it contributes to the vehicle's overall chassis and body structure.

Maintenance

Proper maintenance ensures the longevity and performance of your aluminum fenderwell.

- **Regular Inspection:** Periodically inspect the fenderwell for any signs of damage, cracks, loose fasteners, or corrosion. Pay close attention to weld points or attachment areas.
- **Cleaning:** Clean the fenderwell regularly to remove dirt, road grime, salt, and other corrosive agents. Use mild soap and water, and avoid abrasive cleaners that could scratch the aluminum surface.
- **Corrosion Protection:** While aluminum is corrosion-resistant, it can still oxidize. If the fenderwell is left unpainted or uncoated, consider applying a clear protective coating or polish designed for aluminum to maintain its appearance and prevent surface oxidation.
- **Damage Repair:** Any significant damage, such as dents or cracks, should be addressed promptly by a qualified professional to maintain structural integrity.

Troubleshooting

Most issues related to a fenderwell are typically installation-related or due to external impact. This section addresses common concerns.

Problem	Possible Cause	Solution
Rattling or Vibrations	Loose fasteners or inadequate welding.	Inspect all attachment points. Tighten loose fasteners or re-weld as necessary. Ensure proper bracing.
Premature Corrosion/Oxidation	Exposure to harsh elements without protection; improper cleaning.	Clean regularly. Apply a suitable aluminum protective coating or paint. Avoid harsh chemicals.

Problem	Possible Cause	Solution
Cracks in Material	Excessive stress, improper installation, or material fatigue.	Consult a professional fabricator for repair or replacement. Reinforce stressed areas if possible.

If you encounter issues not listed here, or if solutions do not resolve the problem, contact a qualified automotive fabrication specialist.

Specifications

Attribute	Detail
Product Type	Automotive Fenderwell
Model Number	C3011
Brand	Competition Engineering
Material	Aluminum
Length	40 inches (approximate, as per product description)
Item Weight	20.4 pounds
Product Dimensions (Packaged)	69.21" (L) x 25.52" (W) x 2.84" (H)
Country of Origin	China

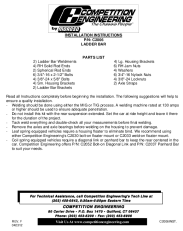
Warranty and Support

For information regarding warranty coverage, technical support, or replacement parts for your Competition Engineering C3011 Fenderwell, please refer to the official Competition Engineering website or contact their customer service directly. Keep your purchase receipt as proof of purchase.
Competition Engineering does not typically provide direct end-user support for custom fabrication components beyond product defects. Consult with your professional installer or fabricator for installation-specific inquiries.

Related Documents - C3011

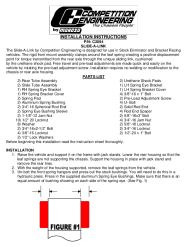
[Competition Engineering 8-Point Roll Bar Installation Instructions]

Step-by-step guide for installing a Competition Engineering 8-Point Roll Bar, including parts list, tools required, and detailed installation procedures.



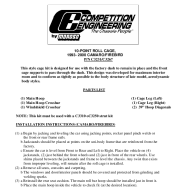
[Competition Engineering C2006 Ladder Bar Installation Instructions]

Comprehensive installation guide for the Competition Engineering C2006 Ladder Bar. Details parts list, step-by-step installation procedures, welding recommendations, alignment, tuning tips, and troubleshooting for automotive applications.



[Competition Engineering Slide-A-Link Installation Guide (P/N C2094)]

Comprehensive installation instructions for the Competition Engineering Slide-A-Link traction system (P/N C2094), designed for Stock Eliminator and Bracket Racing vehicles. Includes parts list, step-by-step installation, and adjustment procedures.

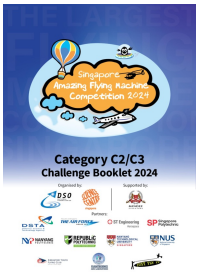


[Competition Engineering 10-Point Roll Cage Installation Instructions for 1993-2000 Camaro/Firebird]

Detailed installation guide for the Competition Engineering 10-point roll cage (P/N C3231/C3267) for 1993-2000 Chevrolet Camaro and Firebird models, including parts list and step-by-step instructions.

[Formula Student 101: 101 Essential Engineering & Design Tips for Teams]

A comprehensive guide from OptimumG engineer Claude Rouelle offering 101 expert tips for Formula Student teams on racecar design, engineering, testing, sponsorship, and project management.



[Singapore Amazing Flying Machine Competition 2024: Category C2/C3 Challenge Booklet]

Official challenge booklet for the Singapore Amazing Flying Machine Competition 2024, detailing rules, categories (C2 Novice, C3 Advance), schedules, awards, technical specifications, and recommended resources for participants.