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TIPS AND TRICKS

Radius Rod Gusset Plate

Tips on installation of AVID Racing rear radius rod gusset kit for the Mav R

1003 | Rev 2

Guide applies to

• AVID-MR-LRRPGUSKIT01 — Can-Am Maverick R Rear Lower Radius Rod Plate Gusset Kit | AVID Racing

Before you begin

Required tools

• Required: Cutting and Sanding Wheel
• Required: C-clamps
• Required: Welding equipment
• Required: Torque wrench
• Required: 5/8" and 14mm Reamer Drill Bit
• Required: Die grinder for fitment adjustment, if needed

Required parts

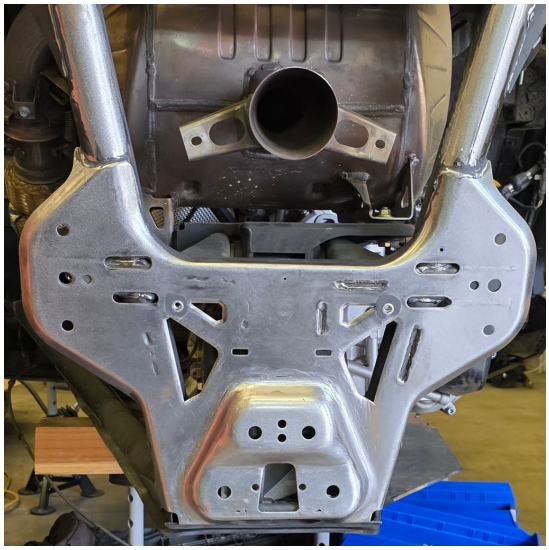
• Radius rod gusset plate
• Provided aluminum spacers
• Provided weld washers
• Plate mounting bolts
• Billet radius rod plate, if used
• Optional kit pull hook, if ordered

> These tips are supplemental references for professional installers, not a complete installation manual or a substitute for a qualified professional installation shop. Follow the vehicle and component manufacturer procedures, safety requirements and specifications for the exact application.

Installation

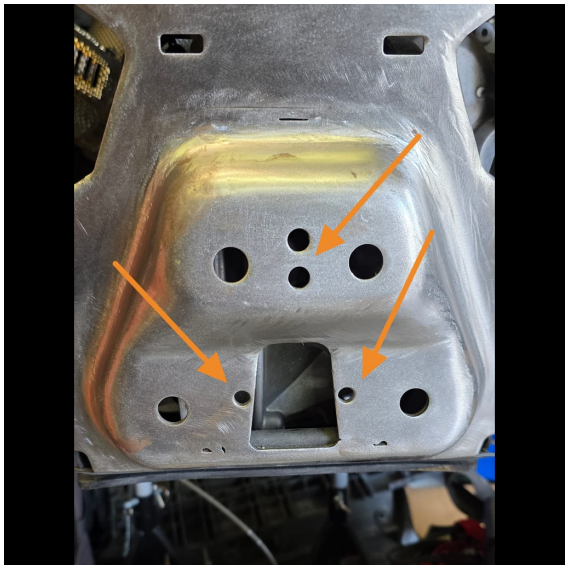
Prepare the chassis, fit and weld the gusset plates, then align and weld the washers before finishing.

Step 1: Disassemble Rear End



Remove all factory radius rods, the rear sway bar, and any other hardware or items mounted to the back plate. Cut off the factory outer radius rod plate. Sand the entire area smooth and remove the paint to prepare for welding.

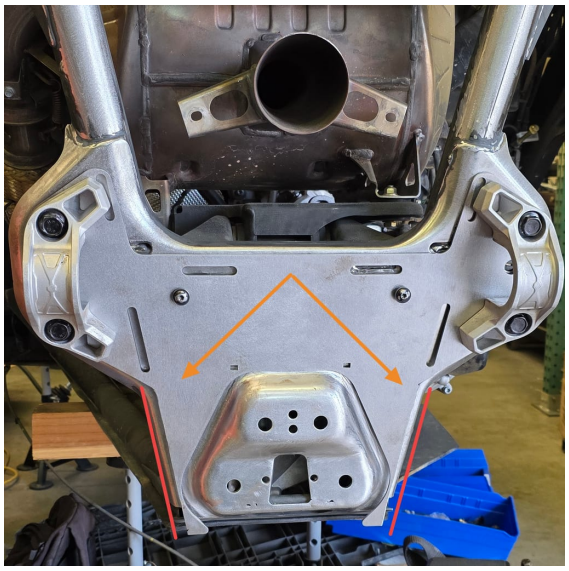
Step 2: Remove Factory Nut Retainers

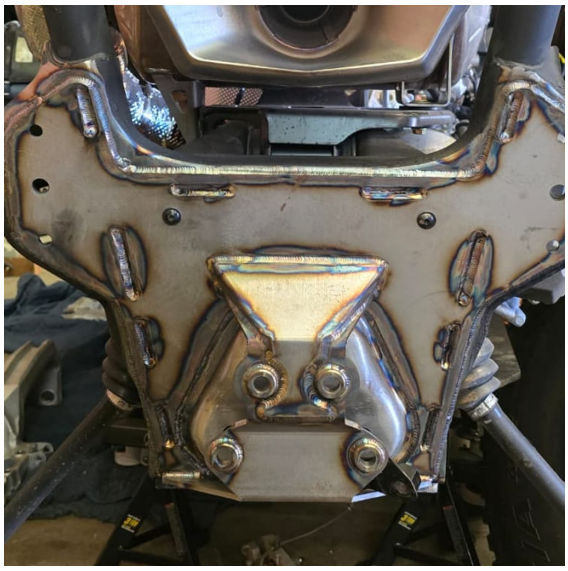




Remove the factory rivets and radius rod nut retainers now. The new plate will block access to drill out the rivets. An AVID aluminum nut retainer is recommended behind this area; it mounts with bolts through the existing rivet holes.

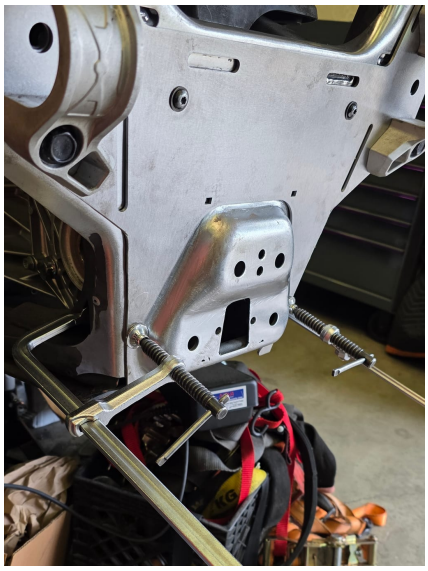
Step 3: Locate and Mount Radius Rod Gusset Plate





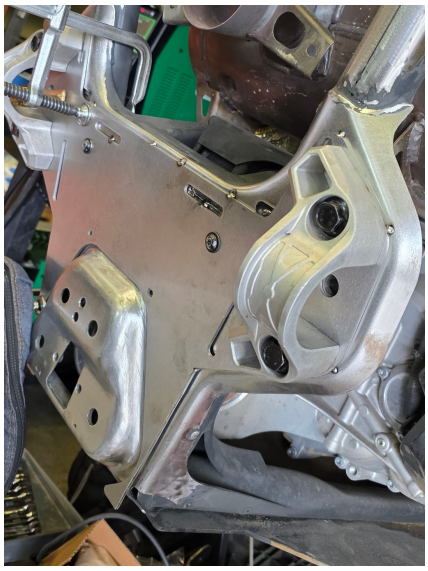
Prepare the mating materials with a DA pad before mounting. Position the plate and reinstall the sway-bar mounts and T30 bolts in their factory locations to align it. For the original two-seat chassis shown in the first picture, trim the plate at the red-marked areas to fit the narrower body section. The four-seat chassis shown in the second picture does not require this modification.

Step 4: Close Gaps for Welding



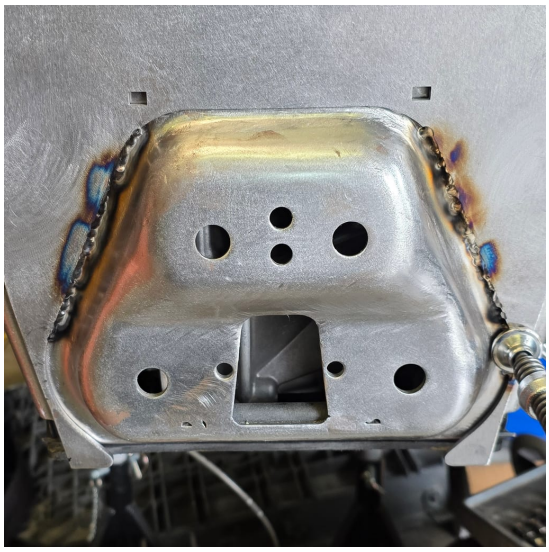
Attach clamps where needed to close gaps and make the plate easier to weld.

Step 5: Tack Plate



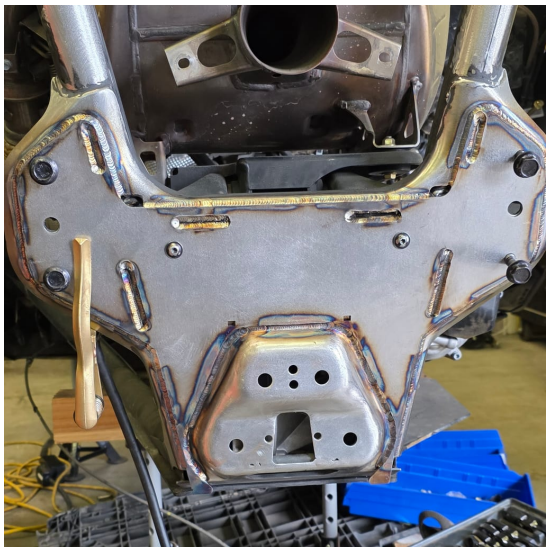
Tack weld around the entire plate, adjusting the clamps as needed to close gaps.

Step 6: Root Weld



Run root welds along the inner lower portion of the radius rod gusset plate. Continue adjusting the clamps if new gaps form after welding.

Step 7: Weld Radius Rod Gusset Plate



Weld the entire gusset plate, alternating between sections to distribute heat evenly. Remove the sway-bar brackets if needed for weld access.

Step 8: Prepare and Fit Rear Gusset Plate



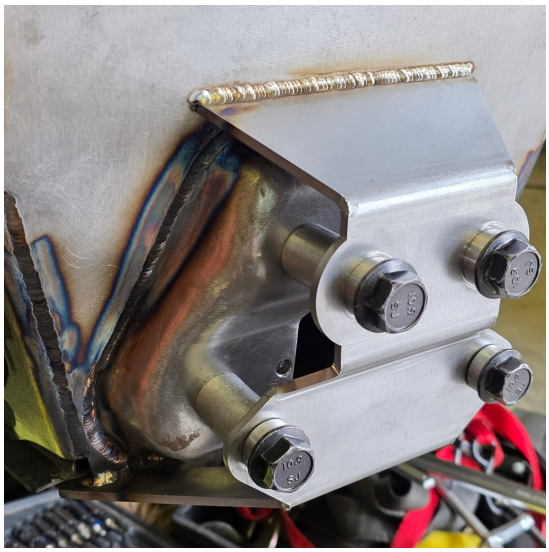
Prepare the rear plate with a DA sander and bolt it to the chassis using the provided aluminum spacers. Trim as needed for fitment; slight bend variation and the kit's intentional overlap may require adjustment. Shave the key-way nubs if needed to align all four bolts. The plate must fit against the internal aluminum spacers without being forced into place. On the illustrated early-year two-seat model, use a C-clamp underneath to hold the lower plate against the bottom of the factory chassis; this is not needed on the four-seat chassis. An AVID aluminum nut retainer is recommended here to keep the pivot spreads correct and equal. Apply pure nickel anti-seize to all bolt through-surfaces and threads during assembly. Once trimming and fitment are confirmed, install the provided weld washers and torque the bolt to 90 ft-lb.

Step 9: Tack Rear Gusset Plate



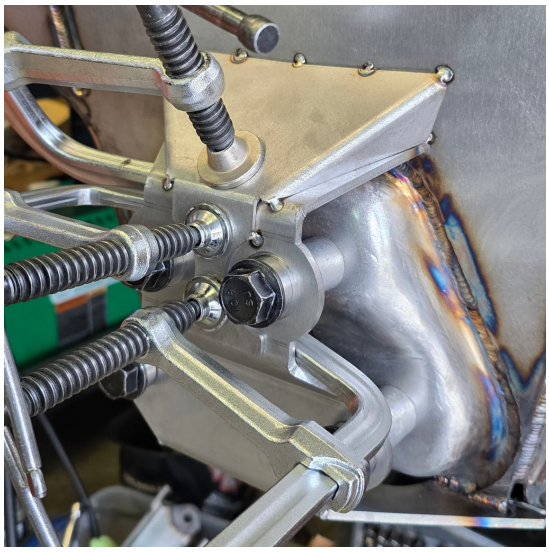
Ensure the weld washers and spacers are inserted, then tack weld around the rear gusset plate. DO NOT WELD THE WASHERS IN PLACE. Leave washer welding until the final fitment and washer-welding stages, after all plate welding is complete.

Step 10: Weld Rear Gusset Plate



Weld around the entire rear gusset plate with the spacers and weld washers retained in position. Leave the washers unwelded.

Step 11: Tack Secondary Rear Gusset Plate



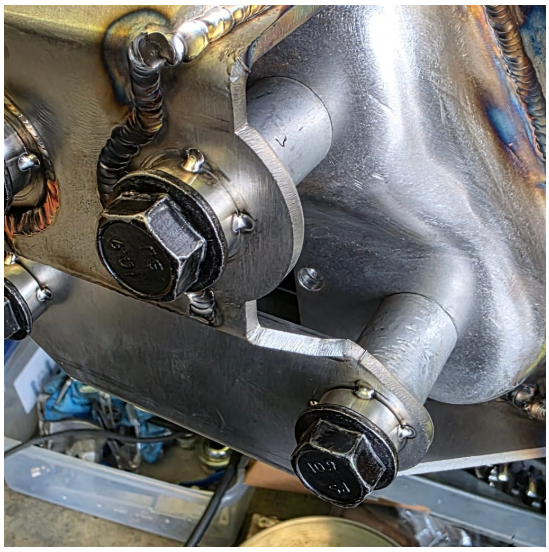
Tack weld around the rear gusset plate overlay, using clamps to close gaps.

Step 12: Weld Secondary Rear Gusset Plate



Weld around the entire secondary rear gusset plate, making root welds where gaps remain before finish welding. Confirm that all plate welding is complete, excluding the weld washers.

Step 13: Fit and Tack Weld Washers



Let the assembly cool completely to ambient temperature before aligning the weld washers; metal movement during heating is why washer welding was deferred. If using a billet radius rod plate, remove the bolts and trial-fit it now. The assembly is sized for a tight race fit; unwanted movement can lead to breakage. For a small spacing discrepancy, use a die grinder to trim the plate hole and allow slight weld-washer movement. If further adjustment is needed, drill the radius rod plate holes to .625 inch (5/8 inch). In this arrangement, the billet radius rod plate is cosmetic and the new chromoly plate provides the strength. Confirm satisfactory fit without binding. Ensure the bolts have pure nickel anti-seize before welding any beads to prevent them from seizing after welding, then tack the weld washers in place.

Step 14: Finish Weld Washers



Loosen the bolts and confirm again that fitment is correct and there is no binding. Weld entirely around each weld washer, alternating between washers to distribute heat evenly.

Step 15: Finish the Assembly



Weld on the logo. Add the optional kit pull hook if ordered, then paint the assembly.

Important notice

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