

Service Bulletin

TRAILER SUSPENSION

Trailer Mechanical Suspensions G-Rail Radius Repair Procedure

March 2025

Introduction

This bulletin provides you basic information necessary for the repair of damaged G-Rail Radius on trailer mechanical suspensions.

Warranty

Refer to the complete warranty for the country in which the product will be used. A copy of the written warranty is included with the product and can be found on the SAF-HOLLAND® website (www.safholland.us).

Notes, Cautions, and Warnings

You must read and understand all of the safety procedures presented in this manual before starting any work on the suspension.

Proper tools must be used to perform the maintenance and repair procedures described in this manual. Many of these procedures require special tools.

NOTE: In the United States, workshop safety requirements are defined by federal and/or state Occupational Safety and Health Act. Equivalent laws may exist in other countries. This manual is written based on the assumption that OSHA or other applicable employee safety regulations are followed by the location where work is performed.

IMPORTANT: Read this manual before using this product. Keep this manual in a safe location for future reference.

⚠ WARNING

Failure to follow the instructions and safety precautions in this manual can result in death or serious injury.

Throughout this manual, you will notice the terms "NOTE", "IMPORTANT", "CAUTION", and "WARNING" followed by important product information. So that you may better understand the manual, those terms are as follows:

NOTE: Includes additional information to enable accurate and easy performance of procedures.

IMPORTANT: Includes additional information that if not followed could lead to hindered product performance.

CAUTION

Used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, could result in property damage.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠ WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

1. Welding Standards

1.1 Scope

When welding is required for the suspension repairs, observe the requirements below. This specification applies to all components supplied by SAF-HOLLAND, and its products. The customer assumes all responsibility for weld integrity if weld material and procedure differ from those listed below.

1.2 Workmanship

All welding on SAF-HOLLAND products **MUST** be performed by a welder qualified according to the appropriate AWS standard for the weld being made or an equivalent standard. It is the responsibility of the customer to provide good workmanship when welding on SAF-HOLLAND products.

1.3 Material

Frame attachment components made from low carbon or high strength alloy steel are to be welded with AWS filler metal specification AWS A5.18, filler metal classification ER-70S-3, ER-70S-6 or equivalent unless specified on the installation drawing.

NOTE: Any substitution for filler material from the above standard must comply, as a minimum, with the following mechanical properties:

Tensile Strength - 72k psi (496 MPa)

Yield Strength - 60k psi (414 MPa) or F (-17.7o C)

% Elongation - 22%

The recommended welding gas for gas metal arc welding (GMAW) is 90% Argon / 10% CO₂. If a different gas is used, welds must comply with penetration requirements shown below. Where the installation drawing specifies different than above, the drawing shall prevail.

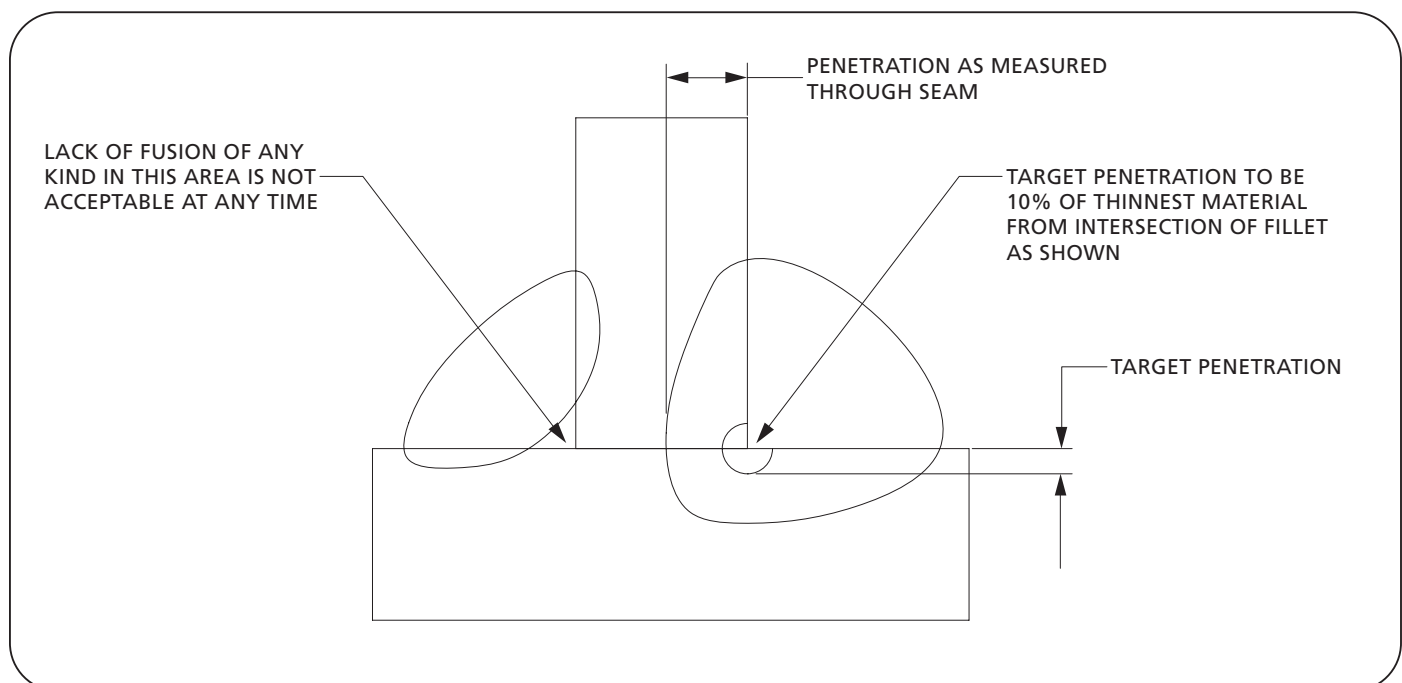
1.4 Procedures

Tack welds used for positioning components are to be located in the center of the final weld, where practical. Tack weld should be completely fused to the finish weld. **DO NOT** break arc at the end of the weld. Back up all finish welds at least 1/2" (12 mm) or a sufficient amount to prevent craters at the end of the weld. Where weld is shown to go around corners, it is assumed the corner represents a stress concentration area. **DO NOT** start or stop weld within 1" (25 mm) of the corner. Particular care should be taken to prevent undercutting in this area.

1.5 Weld Size

If weld size is not specified, the effective throat of the weld must be a minimum of the thinnest material being welded (**Figure 1**).

Figure 1



2. Repair Procedures

IMPORTANT: The trailer MUST be unloaded and on a level surface before beginning installation procedures.

1. Support the front of the trailer on a tractor or with the landing gear (**Figure 2**).
2. Set parking brakes, and chock the wheels. Disconnect the tractor from the trailer.
3. Remove the hold down clips on all four (4) corners of the slider.
4. Retract the slider lock pins.
5. Place multiple jack stands under the vehicle's frame per OEM specified locations, then raise the trailer to a height that allows easy removal of the bogie from under the trailer.

⚠ WARNING Failure to properly support the trailer during installation could create a crush hazard which, if not avoided, could result in death or serious injury.

6. Remove the tire chocks, and remove the bogie.
7. Remove the slide pad fastener in the area of repair (**Figure 3**).
8. Clean area to determine crack size. The crack may be located in this area and may run under the shim (**Figure 4**).

Figure 2

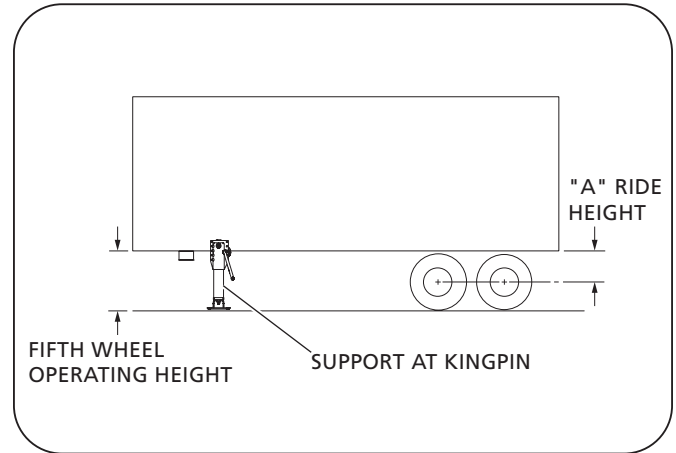


Figure 3

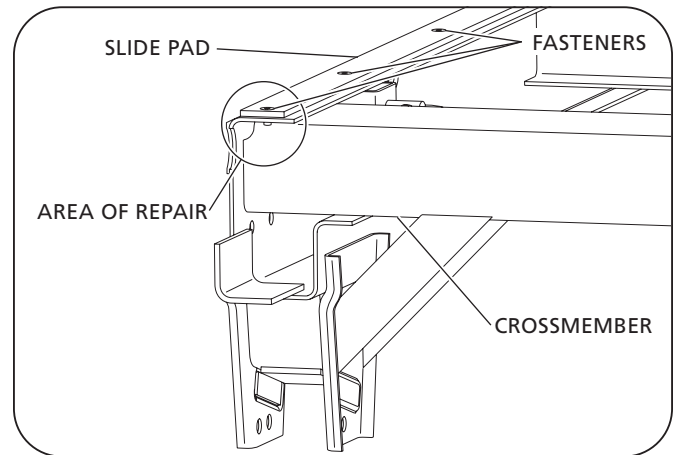
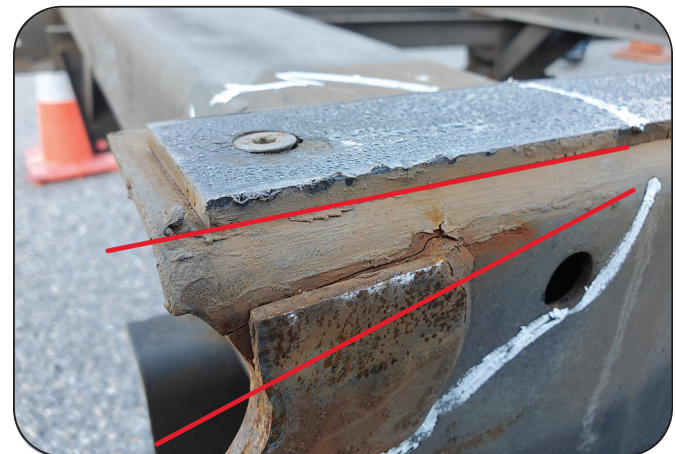


Figure 4



9. If the crack is less than 6.0" in length the following repair can be performed. If the crack is longer than 6.0" replace the box.
10. In the area of the crack, trim the slide pad back to the leading edge of the crossmember (**Figure 5**).
11. Grind out crack with a grinding wheel or die grinder until sound base metal is reached. If the crack runs under the shim, it is permissible to cut the top edge of the shim off to adequately access the crack to grind, and reweld it.
12. Weld ground out crack using welding standards from Section 1.
13. Grind any repair welds made to the top flange to prevent repair weld from interfering with the upper rail or slide pad. Example of weld repair as illustrated in **Figure 6**.

3. Warranty Claim

It is the customer's responsibility to obtain prior authorization from SAF-HOLLAND or an authorized customer service representative before replacing or returning any part. You will also need to provide the following information:

Trailer Manufacturer: _____

Trailer VIN Number: _____

In Service Date: _____

Failure Date: _____

Model Number*: _____

Serial Number*: _____

Part Number*: _____

A digital copy of SAF-HOLLAND's Service Report is available on the internet at www.safholland.com.

* Information is located on the product's serial tag located on the front crossmember.

Figure 5

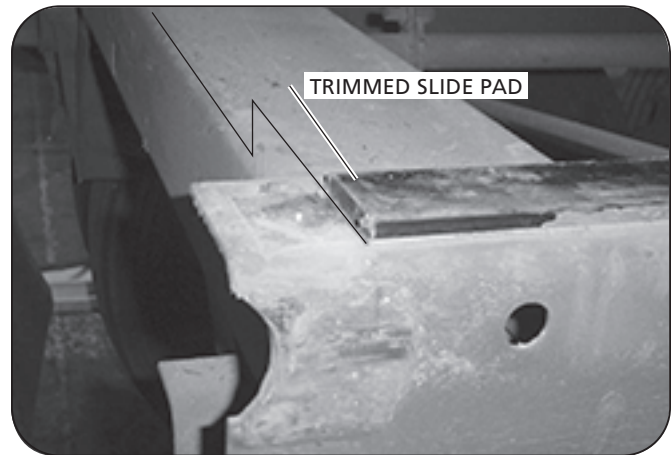


Figure 6





From fifth wheel rebuild kits to suspension bushing repair kits, SAF-HOLLAND Original Parts are the same quality components used in the original component assembly.

SAF-HOLLAND Original Parts are tested and designed to provide maximum performance and durability. Will-fits, look-alikes or, worse yet, counterfeit parts will only limit the performance potential and could possibly void SAF-HOLLAND's warranty. Always be sure to spec SAF-HOLLAND Original Parts when servicing your SAF-HOLLAND product.

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