Replacement Instructions
CB, CBX, NewLite®, Tridem, Airlite 2, UltraLite and DuraSystem® Trailer Suspension

SAF-HOLLAND Group

QWIK RELEASE® Torsion Spring

Introduction

These instructions provide the information necessary to properly replace the QWIK RELEASE® torsion spring on the UltraLite and DuraSystem® Suspension.

We recommend only the use of SAF-HOLLAND Original Parts.

NOTE: A list of SAF-HOLLAND technical support locations that supply SAF-HOLLAND Original Parts can be found at www.safholland.us or contact our customer service group at 888-396-6501.

Notes, Cautions, and Warnings

IMPORTANT: You must read and understand all of the procedures presented in these instructions before starting work on your UltraLite® or DuraSystem Suspension.

⚠WARNING Failure to follow all the replacement instructions contained in this document could cause a hazardous condition to develop which, if not avoided, could result in death or serious injury.

Proper tools must be used to perform the replacement procedures described in these instructions.

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. These instructions are written based on the assumption that OSHA or other applicable employee safety regulations are followed by the location where work is performed.

Throughout these instructions, you will notice the terms "NOTE", "IMPORTANT", "CAUTION", and "WARNING", followed by useful product information. So that you may better understand these instructions, 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. General Safety Instructions

Read and observe all Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

⚠WARNING Failure to properly support the vehicle and axles prior to commencing work could create a crush hazard which, if not avoided, could result in death or serious injury.

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2. Welding Standards

2.1 Scope

This specification applies to all components supplied by SAF-HOLLAND, and its products. The customer assumes full responsibility for weld integrity if weld material and procedures differ from those listed below.

2.2 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.

2.3 Material

Items to be welded that are 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)
Charpy V Notch - 20 ft.-lbs. (27 N•m) at 0° F (-17.7° 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 ***(Figure 1)***. Where the installation drawing specifies different than above, the drawing shall prevail.

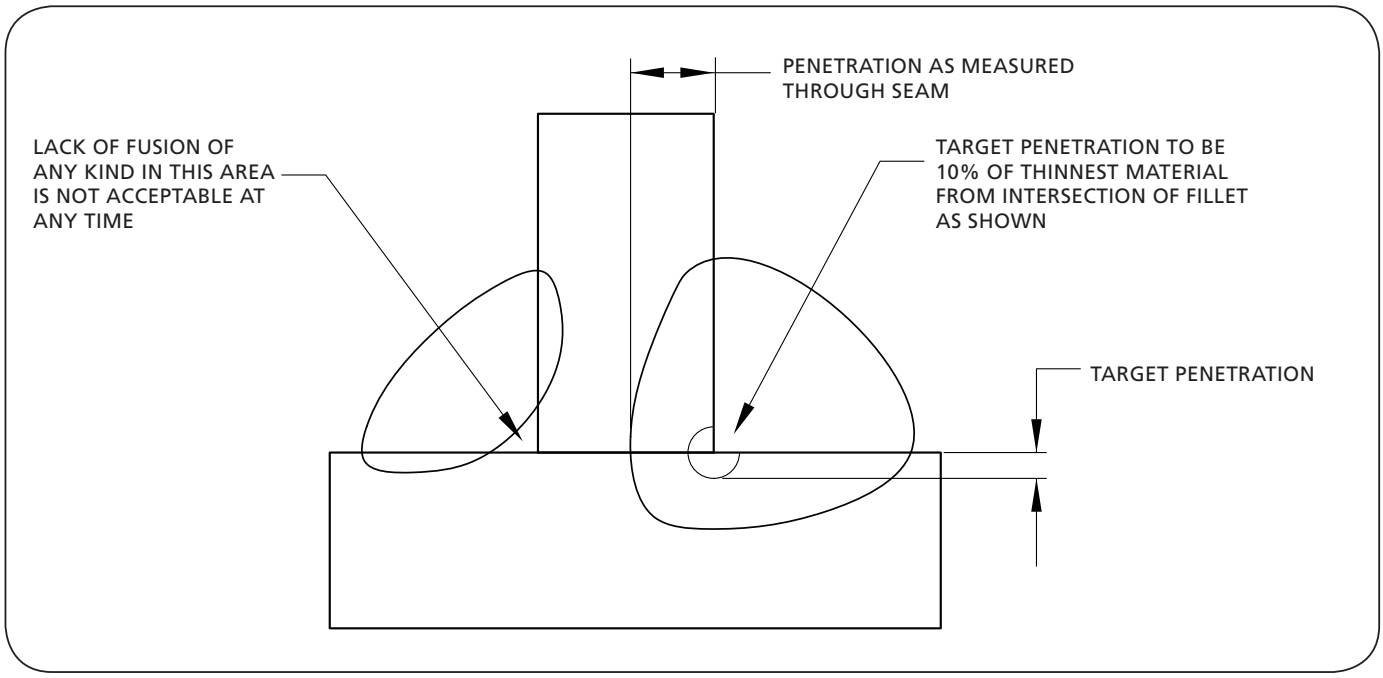
2.4 Procedures

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" (12.7 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" (25.4 mm) of the corner. Particular care should be taken to prevent undercutting in this area.

2.5 Weld Size

If weld size is not specified, the effective throat of the weld must be no smaller than the thinnest material being welded ***(Figure 1)***.

Figure 1



3. Kit Contents

Part Number: SPK0056

ITEM	DESCRIPTION	PART NUMBER	QTY.
1	Arm, Torsion Lever	SL0A1272	1
2	Spring, Torsion	XB-SPG-020-37	1

4. Replacement Procedures

IMPORTANT: The trailer must be unloaded before beginning service procedures.

1. On a level surface, support the front of the trailer with either a kingpin stand, landing gear, or coupled to a tractor.

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

5. CB, NewLite® and CBX Sliders Repair Procedure

1. Disconnect the pull-handle by removing the cotter pin and washer.
2. Cut the welds connecting the lever-arm to the cam shaft.

NOTE: Be sure not to damage the camshaft as a new lever-arm will be welded in the same location.

3. Remove the lever-arm and broken spring.
4. Install the new torsion spring and new lever-arm ***(Figure 2)***.
5. The torsion spring must be pre-loaded against the lever-arm at a 30° angle while holding 4.44" ±0.06" dimension ***(Figure 2)***.
6. Weld the lever-arm to the cam shaft.

NOTE: DO NOT allow arc or excessive heat to contact any part of the torsion spring.

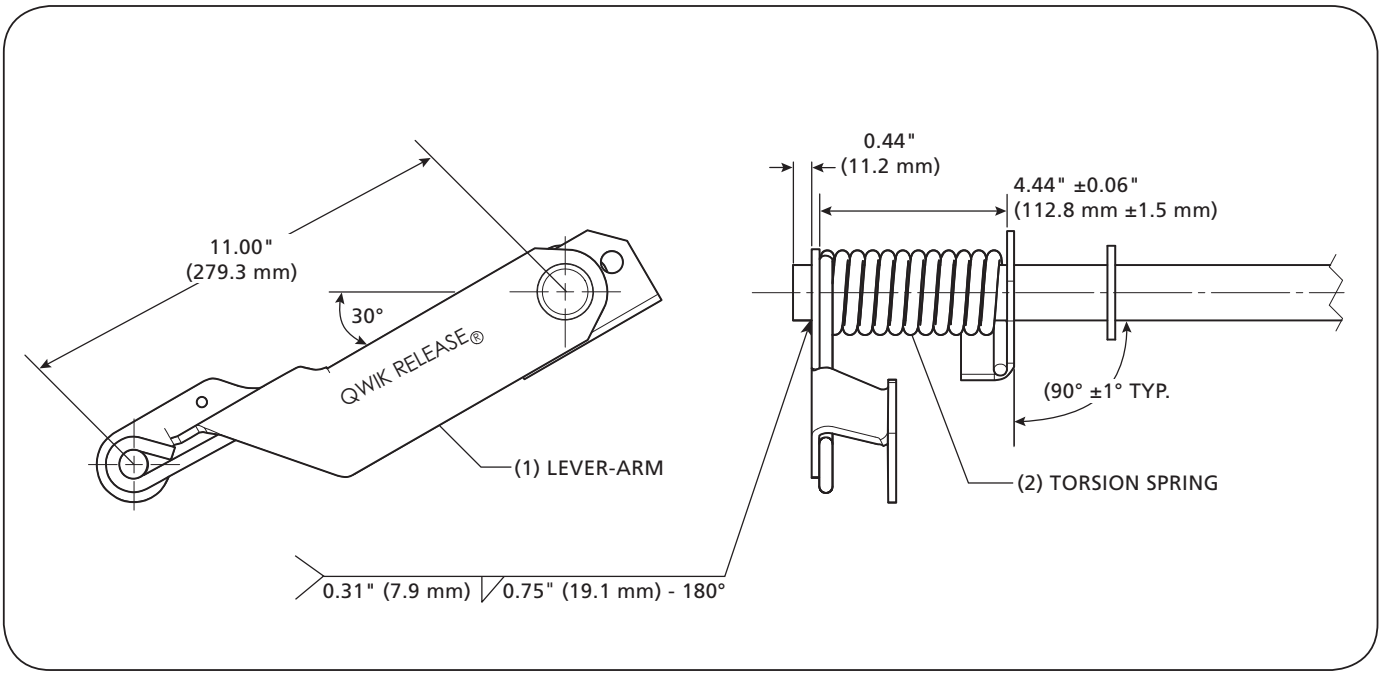
IMPORTANT: Be sure that the torsion spring is protected while welding.

CAUTION Failure to avoid over heating the torsion spring will result in spring failure which, if not avoided, could result in damage to QWIK RELEASE®.

7. Re-install the pull-handle and replace the washer and cotter pin.
8. Check the operation of the unit by pulling the pull-handle out and latching in the unlock position.

NOTE: If the spring is properly pre-loaded, all the lock pins will retract into the slide-box.

Figure 2



6. Airlite 2, UltraLite and DuraSystem® Sliders Repair Procedure

1. Disconnect the pull-handle by removing the cotter pin and washer.
2. Cut the welds connecting the lever-arm to the cam shaft.

NOTE: Be sure not to damage the camshaft as a new lever-arm will be welded in the same location.

3. Remove the lever-arm and broken spring.
4. Install the new torsion spring and new lever-arm ***(Figure 3)***.
5. The torsion spring must be pre-loaded against the lever-arm at a 76° angle while holding 4.44" ±0.06" dimension ***(Figure 3)***.
6. Weld the lever-arm to the cam shaft.

NOTE: DO NOT allow arc or excessive heat to contact any part of the torsion spring.

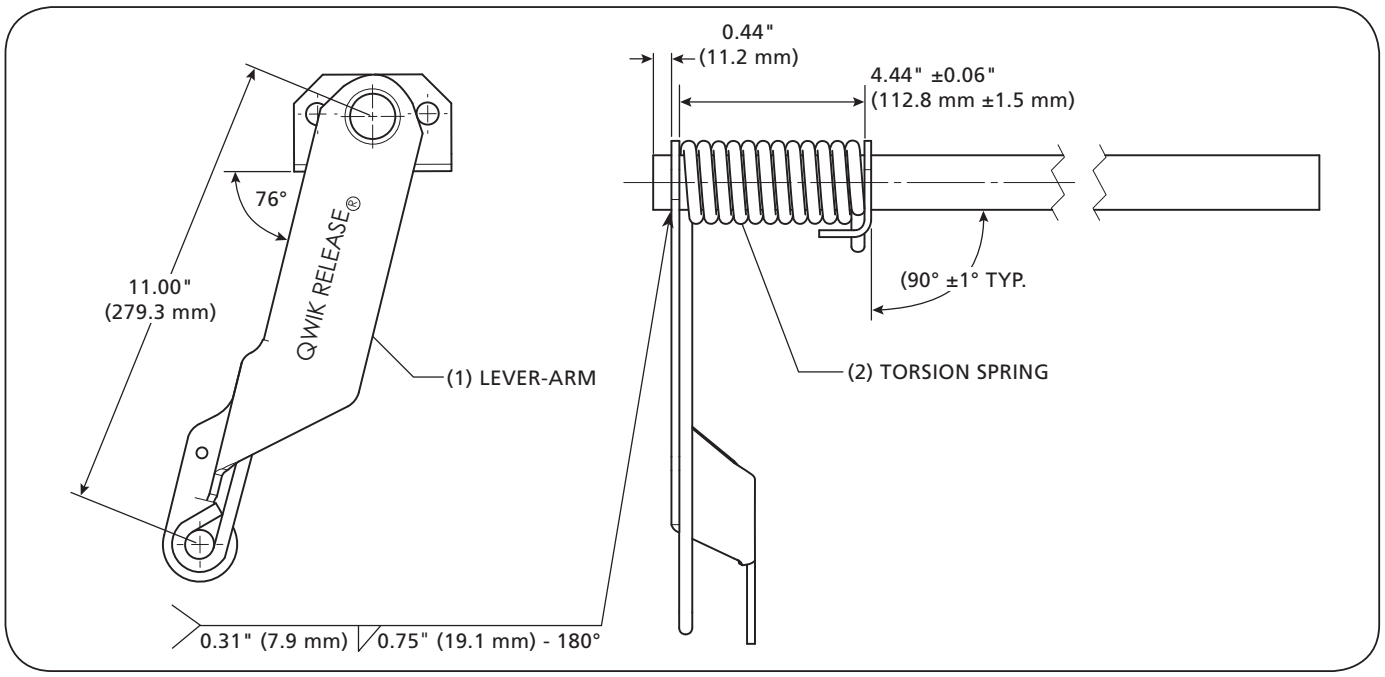
IMPORTANT: Be sure that the torsion spring is protected while welding.

CAUTION Failure to avoid over heating the torsion spring will result in spring failure which, if not avoided, could result in damage to QWIK RELEASE®.

7. Re-install the pull-handle and replace the washer and cotter pin.
8. Check the operation of the unit by pulling the pull-handle out and latching in the unlock position.

NOTE: If the spring is properly pre-loaded, all the lock pins will retract into the slide-box.

Figure 3



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