



Repair Instructions for **Recall #24V853**

Replacing Nuts, Bolts, and Adding Spacers/Shims for Torsion Assembly

Kit Number: A-07084-0000

- **Contents of Kit:**
 - (4) - A-07081-000 - FLANGE LOCKNUT, TOP LOCK, 5/8-11 THR, GRADE G
 - (4) - A-07082-000 - BOLT, 2IN, 5/8-11 THR, GR8
 - (2) - A-02327-000 - TORSION AXLE SPACER 8K TORSION

IMPORTANT SAFETY INSTRUCTIONS

- **Ensure the trailer is on a flat, stable surface.**
- **Use proper lifting equipment** (such as a jack or lift) to raise the trailer safely. Ensure the trailer is securely positioned on stands before beginning any work.
- **Wear appropriate safety gear**, including gloves and safety glasses, when handling heavy-duty components.

Tools and Materials Required

- Torque wrench with a range of 159-201 ft/lbs
 - Socket or wrench size 15/16"
 - Impact driver, as needed
 - Replacement nuts and bolts (A-07081-000 & A-07082-000)
 - Spacers or shims (A-02327-000)
 - Safety stands or lifting jacks
 - Tape measure or feeler gauge to measure gaps
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Step-by-Step Instructions

1. Preparation

1. **Ensure the trailer is safely supported** on a level, stable surface.
2. **Raise the trailer using jacks** or lifting equipment and secure it with safety stands.
 - Ensure the trailer is stable and cannot move while the repair is being performed.
3. **Remove tires** as necessary to allow for ease of installation.
4. **Verify the torsion assembly Bracket** area for any visible signs of damage, wear, or misalignment.

2. Remove Old Nuts and Bolts from Torsion Axle

1. Using a socket or wrench, **remove the existing nuts and bolts** securing the torsion axle to the torsion assembly bracket to the trailer frame.
2. **Discard the removed hardware.** - (Non-reusable)

3. Check for Gap between the Torsion Axle and the Torsion Assembly Bracket

1. **Inspect the gap** between the torsion axle and the Torsion assembly bracket.
 - **If the gap is larger than 1/8" (0.125")**, you will need to add spacers or shims to fill the gap.
 - **If the gap is less than or equal to 1/8"**, proceed with replacing the nuts and bolts without adding spacers or shims.

4. Install Spacers/Shims (If Necessary)

1. **Measure the gap** using a ruler or feeler gauge to confirm it exceeds 1/8".
2. **Select the appropriate spacers or shims** from the repair kit (A-07084-0000).
 - The kit includes **painted shims/spacers** designed to fit the gap.
 - **Install the spacers or shims** into the gap between the torsion axle and the torsion assembly bracket.
 - Ensure the spacers are positioned properly and do not interfere with the alignment of the torsion axle.
 - One spacer or shim should be installed per side. (Driver side/Passenger side)

5. Install New Nuts and Bolts

1. **Align the torsion axle** back into position, ensuring the spacers or shims are properly seated (if applicable).
2. Insert the **new nuts and bolts** from Kit A-07084-000 through the holes in the torsion axle and torsion assembly bracket.
3. Hand-tighten the nuts onto the bolts to secure the assembly in place.
4. **Check the alignment** to make sure the parts are positioned properly before proceeding.

6. Torque the Nuts and Bolts

1. Using a **torque wrench**, tighten the nuts and bolts to the targeted torque range of **180 ft/lbs.**
 - Begin tightening at the center bolts evenly from both sides and work outward to ensure an even distribution of pressure across the assembly.
2. **Double-check all bolts** to make sure they are torqued properly and securely.
 - **Minimum torque: 159 ft/lbs**
 - **Maximum torque: 201 ft/lbs**

7. Final Inspection

1. **Inspect the torsion assembly** to ensure the installation is correct, the gap is properly filled (if spacers/shims were used), and all nuts and bolts are securely tightened.
2. **Test the assembly** to ensure there is no movement, abnormal noise, or misalignment.
3. If any further adjustments or torqueing are needed, re-check the work.

8. Install the Wheels and Lower the Trailer

1. **Mount the wheels** back on, and torque them at the recommended torque range.
 - a. For more information on how to properly mount the wheels, please visit our website at <https://www.diamondc.com/service-maintenance-manuals/#/>
 2. **Carefully lower the trailer** from the stands or lifting jacks. Ensure it is securely positioned back on the ground.
 3. **Conduct a final test** by manually moving the trailer or inspecting it for any unusual noises or vibrations while in operation.
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Additional Notes

- **Do not drive the trailer** until all safety checks have been completed and the assembly is confirmed to be secure.
 - **If any issues persist** after the installation, contact Customer Service for further assistance.
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Contact Information:

- Customer Service Department:
 - Office - (903) 572-2834
 - Email -
 - Dcwest@diamondc.com
 - Dccentral@diamondc.com
 - Dceast@diamondc.com