

# SERVICE BULLETIN TCE-SB012 | October 2018

THUNDER CREEK EQUIPMENT ThunderCreek.com

# SERVICE CONTACT

Ryan Baarda 1833 Highway 163 | Pella, IA 50219 P: 866.535.7667 F: 641.620.8302 E: ryanb@ldj-products.com

### Subject: Axles, brakes and spring seat

Model Number – R250 container trailer

### **Conditions Found:**

- 1. Axle spring seat not welded to axle
- 2. Axles installed incorrectly
- 3. Brake working improperly

# Facts:

- 1. In the first condition found, the axle spring seat is not welded to the axle.
- 2. In the second condition found, the axles may have been installed backwards.
- 3. In the third condition found, if the axles were installed incorrectly the brakes could fail to operate properly.

# Solutions:

- 1. The second and third condition is resolved by making sure that the axles are installed properly from the factory.
- 2. Confirm axles are installed properly, weld spring seat to axle.

# Repair:

- To check for proper installment of the axle, look at the brake backing plate. The two slots should be at the bottom of the backing plate, a bolt head at the top of the backing plate, and the two brake wires coming out towards the rear of the trailer. Please see "Diagram 1: Proper Axle Installation" for reference.
- 2. Weld the axle spring seat to axle, per attached "Instruction to Repair."

Warranty: Labor will be paid at 5 hours per trailer being corrected.

# All service reimbursement claims must be emailed to: ryanb@thundercreek.com

All questions regarding this Service Bulletin should be directed to Ryan Baarda at: 866.535.7667 toll-free or 641.620.4037 direct, or email ryanb@thundercreek.com

# Instructions for Repair

- 1. Jack up trailer using the 4 jacks located on the 4 corners
- 2. Remove all wheels and tires
- 3. Check the brake orientation of the backing plate and match with print 6410811662
- 4. Loosen u bolts and make necessary adjustments, also checking the side to side measurement of the axle to make sure it is centered in the trailer
- 5. Tighten all u bolts and torque to 310ft pounds
- 6. Weld spring seats to axles according to "Diagram 2: Spring Seat Weld Diagram."
- 7. Follow manufacturer's instructions on axle alignment. See "Diagram 3: Axle Alignment."
- 8. Install wheels and tires, torque all bolts to the specifications identified in "Diagram 4: Torque Specifications."

### Diagram 1: Proper Axle Installation



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#### Diagram 2: Spring Seat Weld Diagram





#### **Assembly Instructions**

Notes

1. Check axle manufacturer for electrode specification, weld size, pre-heat and post-heat requirements, etc.

- 2. Be certain axle seats fit axle properly before welding.
- 3. Welds are not permitted more than 2" above or 1.5" below the horizontal centerline of the axle beam.
- 4. All of Hutchens' components are weldable using E70xx welding materials and practices.
- **5.** All spring seats and bottom plates must be parallel within .032" to ensure proper installation of the U-bolts, as well as proper positioning of springs and axles.
- **6** For "cams forward" applications, position the camshaft 10 degrees below axle centerline when using spring seats shorter than 1.75".

The welding rods should conform to AWS (American Welding Society), grade E-7018 (Over-Dried) or comparable. Recommended rod size is 5/32" at voltage and amperage recommended by the electrode manufacturer. For maximum strength, a three-pass weld should be used. The arc should not be broken at the end of each pass and the corners should be wrapped. The electrode should be backed up to fill in the crater at the end of each pass. If the arc is broken between passes, throughly clean the weld between each pass.

Process Electrode			
Shielded metal-arc welding of carbon and low alloy steels.	A.W.S.* E70XX		
Gas metal-arc welding of carbon and low alloy steels.	A.W.S.* ER70S-X		
Submerged arc welding of mild and low alloy steels.	A.W.S.* F-72-XXXXX		
*American Welding Society			



#### Diagram 3: Axle Alignment



To properly align the suspension, make sure the trailer is unloaded. Free the suspension of any "binds" by first pushing the trailer backwards and then pulling forward. While pulling the trailer forward on a level floor, apply the brakes and release. This will assure than an adjustable undercarriage is in its rearmost locked position. The trailer must be level from side to side, as well as from front to rear. Neither service nor parking brakes shall be applied during the measurement procedure.

The axle position may be determined using any established mechanical or optical (laser) measurement equipment.

Measure distances A and B from the kingpin to the front axle. These dimensions must be equal within 1/8 (.125) of an inch. If adjustment is needed, loosen the radius rod clamp bolts and turn the adjustment screw as required. When the front axle is positioned correctly, align any succeeding axles with the front axle by measuring distances C and D. These dimensions must be equal to within 1/16 (.062) of an inch.

After alignment has been completed on all axles, check to make certain that the radius rod clamp bolts and all other fasteners are tightened to the recommended torque requirement.

Check dimension E. The lateral displacement of the trailer body to the axles should not exceed 1/4 (.25) of an inch.



### **Diagram 4: Torque Specifications**

SAFETY ALERT! (1) FOLLOW ALL TORQUE REQUIREMENTS. (2) DO NOT USE ANY COMPONENT WITH VISIBLY WORN OR DAMAGED THREADS. FAILURE TO FOLLOW THESE SAFETY ALERTS CAN LEAD TO LOSS OF VEHICLE CONTROL, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY OR DEATH.				
Hutchens Suspension Torque Requirements 9600-9700 Series ( Decal Part Number 16086-01 Rev. J )				
After an initial break in period, approximately 1000 miles, and at least every 4 months periodically thereafter, ALL bolts and nuts should be checked to insure that recommended torque values are being maintained. Oiled torque values listed are for new fasteners with lubricated threads. It is recommended that new installations be performed with oiled fasteners. For dry threads which have been in service, use the higher torque values which are noted				
below. OILED DRY   1 1/8-7 (9600 / 9700 Rocker Bolt). 590 lb-ft 790 lb-ft   1 -14 or 1-8 (9700 Radius Rod Bolt). 540 lb-ft 720 lb-ft   7/8-14 (Axle U-Bolts & 9600 Radius Rod Bolt). 350 lb-ft 470 lb-ft   3/4-16 (Axle U-Bolts). 310 lb-ft 420 lb-ft   5/8-18 (Radius Rod Clamp Bolt). 130 lb-ft 170 lb-ft   5/8-18 (Spring Retainer Bolt). 35 lb-ft 50 lb-ft				
Hutchens Industries, Inc., P.O. Box 1427, Springfield, Missouri 65801-1427 Toll Free 1 (800) 654-8824				

# Wheel Torque Sequence

Description	Part No.	Application	Torque Min Ft. Lbs.	Torque Max Ft. Lbs.
5%-18 90° Cone Nut	006-109-00	Clamp Ring 033-052-01	190	210 Greased Threads
3/4-10 Hex Nut	006-117-00	Demountable Rim Clamp	210	260
3/4-16 Spherical Nut	006-064-01, 02 006-069-01, 02	Single Wheel Inner Dual	450 450	500 500
1 <sup>1</sup> / <sub>8</sub> -16 Spherical Nut	006-070-01, 02	Outer Dual	450	500
%-18 Non-Swiveling Flange Nut	006-058-00	Wheels	275	325
5‰-18 Swiveling Flange Nut	006-209-00	Wheels	150	175
M22-1.5	006-118-00	Swivelling Flange Nut	450	500



