## H TECHNICAL PROCEDURE TRAILER SUSPENSION SYSTEMS HN OR HP SPINDLE

SUBJECT: Weld-on ABS Bracket Field Installation Procedure

LIT NO: L778 DATE: March 2018

**REVISION:** E

## **INSTALLING THE ABS BRACKET**

This kit is intended for field installation of weld-on ABS brackets on Hendrickson INTRAAX<sup>®</sup>, VANTRAAX<sup>®</sup> and ULTRAA-K<sup>®</sup> suspensions and TRLAXLE<sup>®</sup> Non-integrated Trailer Axles. This procedure applies to installing ABS brackets on HN and HP spindles for both LDA<sup>™</sup> Large Diameter Axles and 5-inch axles.

- **NOTE:** Only a properly trained and certified welder should perform the welding. Follow all applicable safety rules and regulations for welding, including but not limited to, wearing proper eye protection and other personal protective equipment, working in a well ventilated area and keeping all flammable and combustible materials out of the work area. Refer to <u>L64 Welding Procedures</u> general weld guidelines and specifications.
- **IMPORTANT:** This procedure **does not apply** to rotor mounted tone rings with ABS sensors inserted into the torque plate.

For general safety and precautionary statements, refer to Hendrickson literature number <u>T12007</u>, available at www.Hendrickson-intl.com/TrailerLit.

- 1. **Remove** tire / wheel assembly, brake and wheelend components.
- **NOTE:** For applicable wheel-end maintenance procedures, refer to available literature online at www.hendrickson-intl.com/TrailerLit.
- Prepare mating surfaces for welding. The mounting area on the axle and ABS bracket must be free of moisture, dirt, scale, paint and grease. The axle and ABS bracket must also have a minimum temperature of 60°F (16°C).



Figure 1: Positioning ABS bracket along length of the axle





- **NOTE:** Be sure to use the correct bracket for the axle diameter as shown in Table 1.
- 3. To position the ABS bracket along the length of the axle, **measure** back (inboard) from the bearing shoulder to the face of the ABS bracket the distance indicated in Figure 1.





Figure 2: Aligning ABS bracket with brake spider slot

4. To position the ABS bracket around the outside diameter of the axle (Figure 2), align the center of the ABS bracket hole with the center of the slot in the brake spider or with the center of the hole in the torque plate.

**IMPORTANT:** The ABS bracket hole must be aligned with the slot in the brake spider or with the hole in the torque plate. If off center, the ABS sensor may not clear the brake spider or torque plate during installation.



Figure 3: Properly positioning ABS bracket

- 5. Ensure the ABS bracket is flat against the axle and properly aligned. The ABS bracket must not be tilted or askew (Figure 3).
- 6. Temporarily **clamp** the bracket in place.
- 7. Verify the ABS bracket is in the proper location.
- 8. **Insert** an ABS sensor into the bracket to ensure adequate clearance with the brake spider and the hub.
- 9. Cover spindle area.





**HN Spindle** 



**HP Spindle** 



Figure 4: Weld details

- 10. Verify ABS bracket location and sensor clearance, then weld the ABS bracket to the axle with a  $\frac{1}{4}$  inch (6.3 mm) fillet weld (Figure 4).
- 11. When cool, remove clamp.
- 12. Apply surface coat as needed.

For assistance in the United States and Canada. call Hendrickson Trailer Technical Services at 866-RIDEAIR (743-3247) or e-mail HTTS@Hendrickson-intl.com.

## Call Hendrickson at 866.RIDEAIR (743.3247) for additional information.



www.hendrickson-intl.com

TRAILER COMMERCIAL VEHICLE SYSTEMS 2070 Industrial Place SE Canton, OH 44707-2641 USA 866.RIDEAIR (743.3247) 330 489 0045 • Fax 800 696 4416

Hendrickson Canada 250 Chrysler Drive, Unit #3 Brampton, ON Canada L6S 6B6 800 668 5360 905.789.1030 • Fax 905.789.1033

## Hendrickson Mexicana

Circuito El Marqués Sur #29 Parque Industrial El Marqués Pob El Colorado Municipio El Margués Querétaro México C P 76246 +52 (442) 296.3600 • Fax +52 (442) 296.3601