

# Technical Bulletin

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## Subject: **Retrofitting Wide-Based Tires: Increased Vibration Requires Improved Air Chamber Bracket Supports**

This Bulletin addresses vehicles originally equipped with dual tires on the drive axles which are retrofitted with “wide-based” tires (also referred to as “Super Singles”).

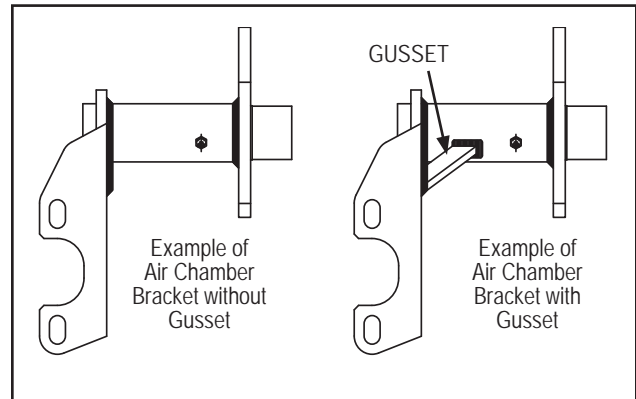
Test data has shown that retrofitting “wide-based” tires can result in higher vibrational loading of vehicle drive axles and wheel ends. As a result, the air chamber bracket supports are potentially exposed to vibrations and stresses beyond their original design capabilities.

As with all retrofits, Bendix recommends that the installer confirm with the vehicle Original Equipment Manufacturer (OEM) that the changes to be made to the vehicle are approved and obtain from the OEM any vehicle modifications that are required (e.g. suspension clearances, etc.) before proceeding.

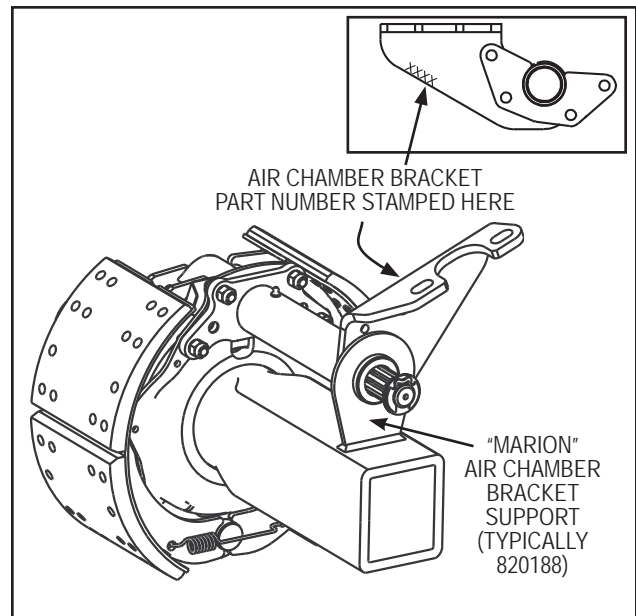
When vehicles equipped with Bendix foundation brake components are retrofitted with wide-based tires, Bendix requires the vehicles to be further equipped with:

- Air chamber brackets with gussets (see Figure 1). If the air chamber brackets **do not** have gussets, they must be replaced with Bendix approved air chamber brackets **with** gussets. Identify the part number stamped into the support arm (see Figure 2 for location) and refer to BW7253 for the proper gusseted replacement.
- Bendix “Marion” air chamber bracket supports or other Bendix approved air chamber bracket supports, welded to the axle, are required (see Figure 2).

***Failure to make all necessary changes when retrofitting wide-based tires will void the warranty on all Bendix® foundation brake products equipped on the vehicle.***



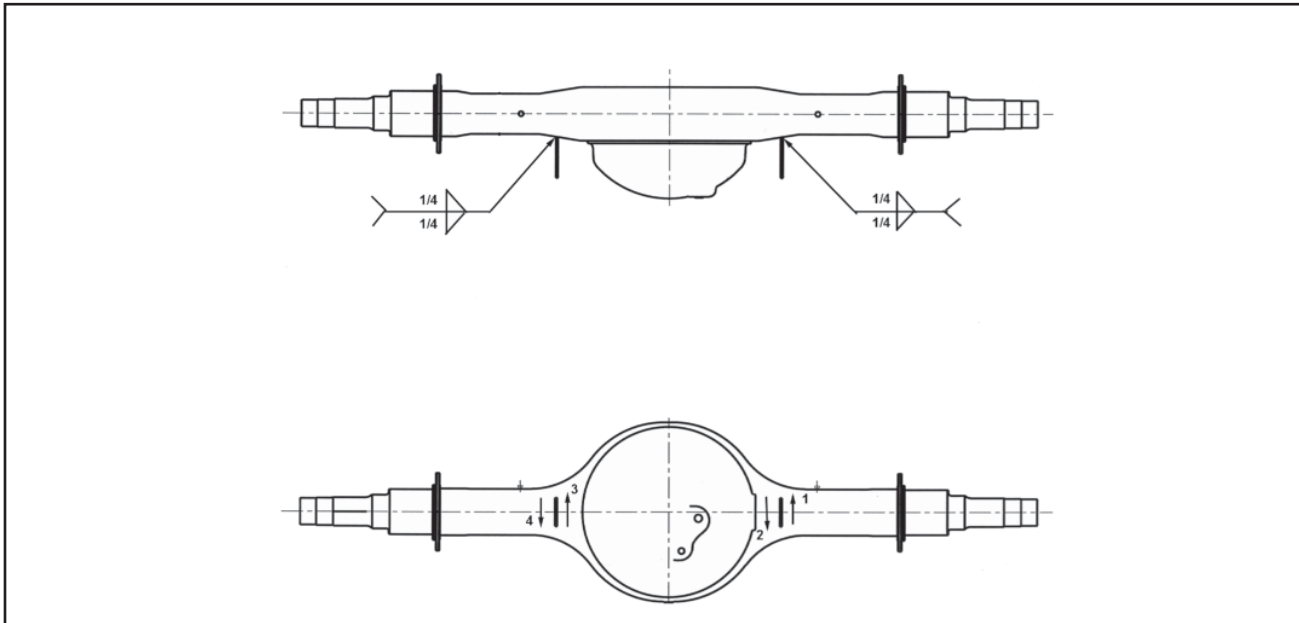
**FIGURE 1 - EXAMPLES OF AIR CHAMBER BRACKETS WITH AND WITHOUT GUSSETS**



**FIGURE 2 - EXAMPLE OF “MARION” AIR CHAMBER BRACKET SUPPORT**

**WARNING: Follow all standard industry safety guidelines when welding, including disconnection of batteries.**

(Continued over)



**FIGURE 3 - EXAMPLE OF SUPPORT WELD ARRANGEMENT**

Whenever available, use the axle manufacturer's recommendations for welding the additional "Marion" brackets - the welding notes below are shown for reference only (See Figure 3):

- E70T-5 FCAW or ER70S-6 GMAW Single Pass Process 60°F (15.5°C) Minimum Pre-Heat Temperature
- Maximum Fit up gap of 0.16 inch (4mm)
- The order of welding may be reversed or started on the opposite side
- The direction of welding may be completely reversed

Reference:

Application Guideline Catalog - BW7260  
Illustrated Parts List - BW7253

Available from the Literature Center at [www.bendix.com](http://www.bendix.com)  
and also from [www.Roadranger.com](http://www.Roadranger.com).

Questions or changeover information:  
Call 1-800-Air-Brake (1-800-247-2725)

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