



News Release

For more information, contact:

Barbara Gould
Bendix Commercial Vehicle Systems LLC
(440) 329-9609
barbara.gould@bendix.com

or
Ken Kesegich
Marcus Thomas LLC
(888) 482-4455
kkesegich@marcusthomasllc.com

FOR IMMEDIATE RELEASE
From the Bendix Tech Tips Series

AUTOMATIC SLACK ADJUSTERS: KEY ADVICE FOR SAFETY AND COMPLIANCE

The Importance of Keeping ASAs Regularly Greased and in Good Working Condition

ELYRIA, Ohio – Sept. 3, 2015 – Automatic slack adjusters (ASAs) are a key part of keeping today's commercial vehicle brakes operating at peak performance and up to regulatory standards. As part of its Bendix Tech Tips series, and in advance of this year's Commercial Vehicle Safety Alliance (CVSA) annual Brake Safety Week inspection campaign, Bendix Commercial Vehicle Systems LLC stresses two key recommendations for automatic slack adjusters: keep them properly lubricated, and do not routinely manually adjust out-of-adjustment wheel-ends equipped with ASAs.

"All too often, we see automatic slack adjusters that are not being greased regularly during scheduled maintenance and inspections," said Frank Gilboy, product manager, automatic slack adjusters at Bendix Spicer Foundation Brake LLC, a joint venture between Bendix Commercial Vehicle Systems LLC and Dana Commercial Vehicle Products, LLC. "And slack adjusters that don't perform properly through lack of lubrication can have a direct impact on both safety and regulatory compliance."

Brake Safety Week, occurring Sept. 6-12, is an annual outreach and enforcement campaign founded in 1998 and designed to improve commercial vehicle safety throughout North America. Its roadside inspections include brake stroke measurement. Wheel-ends beyond the maximum allowable brake stroke are considered out of adjustment, and penalties can include fines or trucks placed out of service.

Greasing the ASA serves two vital purposes: Forcing the new lubricant in purges the old grease from the adjuster, along with any water or contaminants that have found their way in; and it protects the adjuster's internal gear sets, clutches, and other components from wear. Both are necessary to keep the ASA working properly to maintain correct brake stroke and provide optimal stopping performance.

Lubrication is a simple process, regardless of the adjuster's manufacturer. Just locate the ASA's grease fitting, attach the hose from a grease gun, and inject new grease until old grease is forced through the release opening. The release location varies depending on the maker – for the Bendix® Versajust® LS™, it's on the boot; for others, it's a hole in the casting – and manufacturer instructions will offer advice on how much grease to purge from the adjuster, and what lubricant to use.

"It should easily take less than a minute per adjuster," Gilboy said. "Bendix recommends greasing with an NGLI grade-2 lubricant every 30,000 miles, but you can also make things less complicated by greasing the ASAs every time you do a preventive maintenance inspection."

Because properly installed, operating, and lubricated automatic slack adjusters should never need adjusting after the initial setup, aside from brake relining, Bendix also emphasizes that an out-of-adjustment ASA should never simply be manually adjusted to correct an out-of-adjustment brake stroke.

Gilboy noted that while there are many factors that can cause an ASA to be out of adjustment, it is likely that none of these will be remedied with a manual adjustment.

"We continue to hear stories of technicians or vehicle owners who believe that it's acceptable to routinely adjust automatic slacks," continued Gilboy. "This may be a holdover from the days of manual slacks, but it's simply not acceptable for ASAs. Manual adjustment may seem to temporarily solve the out-of-adjustment issue, but there may be other factors at play that must be addressed – otherwise the condition will reoccur. As always, it's critical to maintain, adjust, or replace slack adjusters according to the manufacturer's instructions."

Bendix typically recommends measuring the chamber stroke on each wheel-end by checking the distance from the chamber to the pin with the brakes released, and again after a full brake application. The difference between the two measurements is the chamber stroke. The maximum allowable stroke under CVSA guidelines is based on the chamber size and type.

To determine whether a slack adjuster is properly adjusting the brake, refer to the manufacturer's instructions and mechanism tests. (For example, the Bendix Versajust slack adjuster test is described on page 6 of the product Service Data Sheet.)

Once the ASA itself has been inspected, use the following checklist to examine other wheel-end components and fix any situations that can lead to overstroke. Where component replacement is necessary, Bendix stresses the use of OEM-equivalent equipment to ensure correct operation and best performance.

- Check for proper lubrication of the brake camshaft and cam tube.
- Inspect the cam head and rollers for abnormal wear.
- Evaluate the brake's friction blocks for wear level and cracks, replacing the friction if necessary.
- Inspect the camshaft bushings for wear by checking radial and axial endplay, following the brake manufacturer's guidelines. If necessary, replace the bushings.
- Check the brake drums for maximum diameter and surface finish, and replace if necessary.
- Check the brake shoe return springs to ensure a proper return to the "zero stroke" position.
- Inspect the return spring on the air chamber or on the service side of double diaphragm spring brakes.
- Inspect the clevis pins connecting the chamber to the automatic slack adjuster to ensure they turn freely and are coated with an anti-seize lubricant.

Upon completing these inspections, verify the slack adjuster's performance by following the manufacturer's instructions on conducting a functional check. If the slack adjuster is still not functioning according to the manufacturer's recommendations, replace per TMC RP609.

"The correct brake stroke is absolutely crucial to braking performance and safe vehicle operation, so it plays an important role in roadway safety," Gilboy said. "Today's automatic slack adjusters, kept in good working condition and regularly greased, help brake systems perform to their engineered specifications, leading to safer trucks and safer highways for everyone."

Information in the Bendix Tech Tips series, along with instructional videos and interactive training, can also be found at the Bendix On-Line Brake School, www.brake-school.com. For more information on automatic slack adjusters, reference the Bendix SD-05-4630, in the Document Library on bendix.com.

Additionally, the Bendix On-Line Brake School at www.brake-school.com provides access to the company's knowledge database and technical resources on all aspects of electronics and air brake maintenance and product education. The company also shares expertise through its field-tested sales and service professionals; a 100 percent ASE-certified

field technical support team; and the Bendix Tech Team (at 1-800-AIR-BRAKE), an expert technical support group providing service advice, brake system troubleshooting, and product training.

About the Bendix Tech Tips Series

Bendix, the North American leader in the development and manufacture of leading-edge active safety and braking system technologies, is committed to helping keep commercial vehicles on the road and in good working condition. The Bendix Tech Tips series addresses common commercial vehicle maintenance questions and issues concerning the total range of components found within foundation and air brake systems, as well as advanced safety systems.

About Bendix Commercial Vehicle Systems LLC

Bendix Commercial Vehicle Systems, a member of the Knorr-Bremse Group, develops and supplies leading-edge active safety technologies, energy management solutions, and air brake charging and control systems and components under the Bendix® brand name for medium- and heavy-duty trucks, tractors, trailers, buses, and other commercial vehicles throughout North America. An industry pioneer, employing more than 3,000 people, Bendix is driven to deliver solutions for improved vehicle safety, performance, and overall operating cost. Bendix is headquartered in Elyria, Ohio, with manufacturing plants in Bowling Green, Kentucky; Huntington, Indiana; North Aurora, Illinois; and Acuña, Mexico. For more information, call 1-800-AIR-BRAKE (1-800-247-2725) or visit www.bendix.com. To learn more about career opportunities at Bendix, visit www.bendix.com/careers. Follow Bendix on Twitter at http://twitter.com/Bendix_CVS. Log on and learn from the Bendix experts at www.brake-school.com.

About Bendix Spicer Foundation Brake LLC

Bendix Spicer Foundation Brake LLC combines and expands the complementary wheel-end foundation brake technologies of two global leaders – Bendix Commercial Vehicle Systems LLC and Dana Commercial Vehicle Products, LLC. The joint venture, formed in July 2004, is a single, complete source for OEM brake system design, manufacturing, hardware, and support for all foundation brake components and actuation systems, as well as all-makes coverage of nearly 50,000 medium- and heavy-duty aftermarket parts. Bendix Spicer Foundation Brake LLC is headquartered in Elyria, Ohio, with engineering operations in both Elyria and Kalamazoo,

Michigan, and a manufacturing facility in Bowling Green, Kentucky. For more information, call 1-866-610-9709 or visit www.foundationbrakes.com. To learn about career opportunities at Bendix Spicer Foundation Brake, visit www.bendix.com/careers. Follow BSFB on Twitter at http://twitter.com/Bendix_CVS. Log on and learn from the Bendix experts at www.brake-school.com.

#