

LESS BRAKE DRAG = REDUCED FUEL CONSUMPTION

Bendix testing had already established that slacks with a fast adjustment rate have a tendency to over adjust, which leads to brake drag. A dragging brake speeds friction and drum wear.

We knew vehicles with dragging brakes had higher fuel consumption – as the brake must work harder to overcome the drag conditions by wearing away at the friction until the running clearance is restored. Our next task was getting data on that fuel consumption penalty.

Proving it on the track

So, we put it to the test on the track. Using a third-party test company, we equipped two identical vehicles – one with a

slack set to drag torque comparable to the slacks shown in Table 1, and the other slack with no drag. We ran the two vehicles at the same time, at the same speed, for 90 miles. Then we measured the fuel consumption.

Avoid the penalty

The vehicle with dragging brakes had significantly higher fuel consumption than the truck with no brake drag. In fact, there was a fuel consumption penalty of more than 1.5% for the dragging brake.\*

\* If brake drag occurred 25% of the time, the fuel consumption penalty would be roughly 1.5% - 7.5%.

Consider these numbers for your operation.		
100% drag	=	1.0 gal/90 miles
400 miles/day	=	4.4 gal/day
@\$5.14/gal	=	\$5,654 (250 working days/year)
@25% drag*	=	\$1,414/per year (per vehicle)
*This equates to 1.5% MPG penalty. Fuel price based on YTD average for U.S. diesel from EIA (U.S. Energy Information Administration).		

Slack adjusters that tend to drag can penalize your bottom line via increased fuel costs while Bendix® Versajust® slack adjusters help minimize the risk of drag and deliver savings.

Think about the cumulative effect.

Fuel savings of 1.5% multiplied by the number of trucks in your fleet and the miles they travel – the potential savings are significant.



LOWER YOUR TOTAL COST OF OWNERSHIP (TCO) WITH BENDIX® VERSAJUST®

Brakes are the most important safety equipment on your vehicle. Choose a slack adjuster that gives you the best brake performance, and safety, while protecting your bottom line. Choose Bendix® Versajust® Slack Adjusters.

By lowering the risk of dragging brakes, Versajust helps lower TCO with:

Reduced fuel consumption

Extended friction and drum lining life

Reduced maintenance costs/need for brake jobs

Lowered risk of CSA violations for brakes out-of-adjustment

Application	Versajust® LS™	Versajust® GS™
Linehaul	<input checked="" type="radio"/>	<input type="radio"/>
Tractors & Trucks	<input checked="" type="radio"/>	<input type="radio"/>
Drive/Steer Axles	<input checked="" type="radio"/>	<input type="radio"/>
Trailer	<input checked="" type="radio"/>	<input type="radio"/>
School Bus	<input checked="" type="radio"/>	<input type="radio"/>
Bus (All Other)	<input type="radio"/>	<input checked="" type="radio"/>
Refuse	<input type="radio"/>	<input checked="" type="radio"/>
Delivery Trucks	<input checked="" type="radio"/>	<input type="radio"/>
Mining	<input type="radio"/>	<input checked="" type="radio"/>
High Axle Load Applications	<input type="radio"/>	<input checked="" type="radio"/>

☒ Recommended ☐ Optional ☐ Not Compatible



Optimize brake performance, improve fuel efficiency and extend lining and drum life with Bendix Versajust Slack Adjusters. Contact your Bendix Account Manager, call 1-800-AIR-BRAKE (1-800-247-2725), or visit bendix.com today.

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Get complete coverage with Bendix® Automatic Slack Adjusters

The Versajust advantage now extends to applications that require a grounded-style slack. And with the Versajust GS now in our lineup, your fleet can count on Bendix for all your slack adjuster needs.

Feature	Versajust® LS™	Versajust® GS™
Arm Length	5", 5.5", 6"	5.5", 6", 6.5"
Angles	Straight	-34°, 0°
Offset	0", 5/8"	2" offset available at fleet request
Spline	1.25 x 10 1.25 x 24 1.5 x 10 1.5 x 28 1.60 x 37	1.5 x 28 1.5 x 10
Yoke	Easy-on, Quick Connect, None	No Yoke (Grounded)
Warranty	6 Years (line haul)	6 Years (line haul)

Most popular Part Numbers for Versajust® LS™ (Provide 80% Application Coverage)

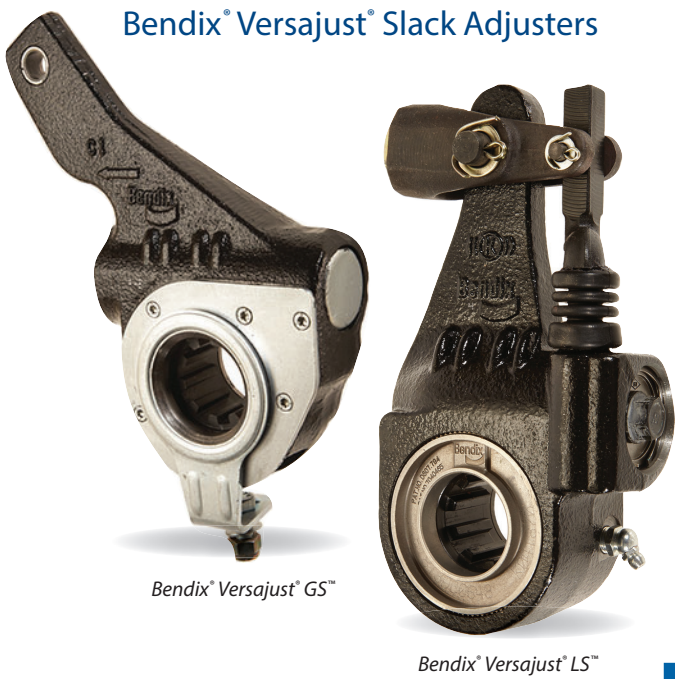
Part Number	Arm Length	Spline
K041870	5.5"	10
K043197	5.5"	28
K041876	6"	10
K041877	6"	28

To view additional part numbers, go to B2Bendix.com and select "Products", then "Slack Adjusters".  
For installation instructions and maintenance information see Service Data Sheets SD-05-4630 for Versajust LS and SD-05-4623 for Versajust GS.

Order part numbers above in pairs and save. Simply add "KT" to the end of the part number to order a 2-pack.



ARE YOUR BRAKES A DRAG ON YOUR BOTTOM LINE?



You'd never think about driving with your brakes on, but right now your slack adjuster may be creating a similar condition. Over-adjusting slacks result in brake drag, which accelerates wear of your linings and drum, leading to more downtime and maintenance.

And that's not all. Brake drag increases fuel consumption. Add it up... your slack adjuster has a big impact on your bottom line.

It doesn't have to be that way. Bendix® slack adjusters can help:

- Minimize the risk of over-adjustment and dragging brakes
- Reduce fuel consumption by at least 1.5%
- Extend lining life by up to 16% and drum life by up to 30%
- Lower risk to CSA scores for out-of-adjustment conditions
- Reduce maintenance costs/need for brake adjustments





PROBLEM: PREMATURE LINING WEAR, OVER-ADJUSTMENT

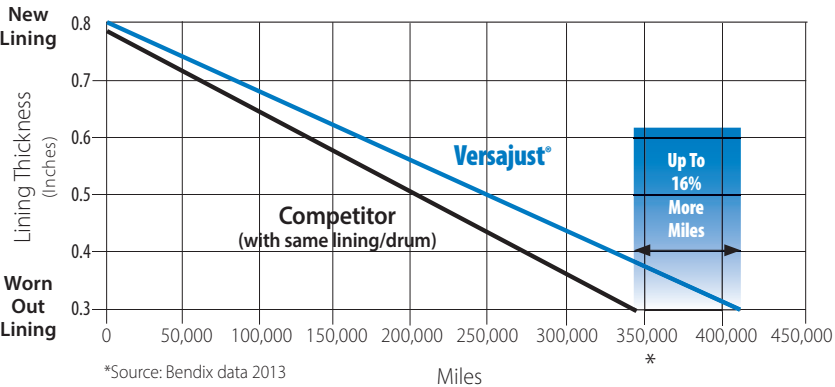


The majority of slack adjusters on the market today have a fast adjustment rate that increases the likelihood of dragging brakes. As the drum heats up and expands during normal braking, these automatic slack adjusters adjust ‘too quickly’ to the enlarged drum. When the drum cools down and returns to normal size, the running clearance between the shoe and drum is then reduced or even eliminated, resulting in a dragging brake. Dragging brakes accelerate wear on the brake lining and drum and reduce fuel economy.\*

\*Anytime you have brake drag, the brake should be serviced to determine root cause.

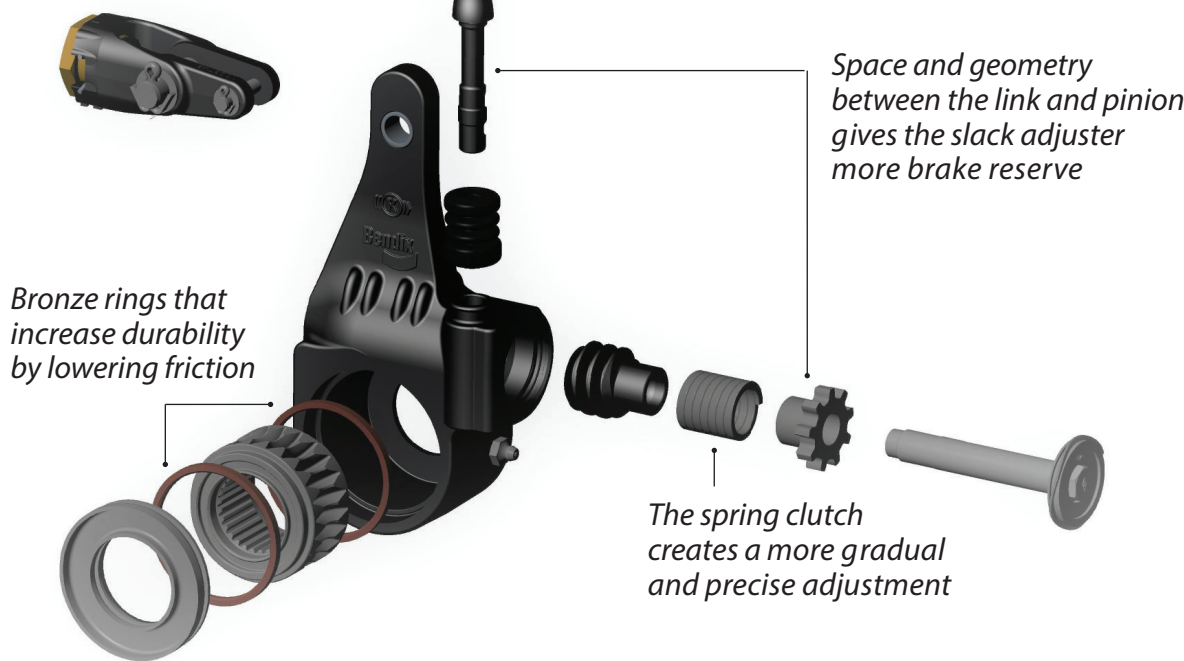


LINING WEAR RATE



Now available in both link- and grounded-styles for complete coverage.

VERSAJUST® LS™



VERSAJUST® LS™ SLACK ADJUSTER (Link-style slack)

Our link-style slack adjuster covers 90% of common applications, such as line haul, tractors and trucks, drive and steer axles, and trailers.

- Gradual adjustment rate lowers risk of brake drag and the need for brake maintenance
- Maintains gap/running clearance
- Helps lower risk of a CSA violation for brakes out-of-adjustment – free stroke is 1/2” to 5/8”
- 6-year /1 million-mile line haul warranty\*



WE HAVE THE FIX.

An adjustment rate that’s gradual, continuous, and precise.

DRAG TORQUE/ADJUSTMENT RATE

	Brake Drag Torque (ft-lbs)	Applications to Adjust 1/4"	
Haldex® S-ABA	730	22	<ul style="list-style-type: none"><li>■ High brake drag torque increases fuel consumption</li><li>■ During downhill braking, drum expansion can result in 1/4” or more of additional chamber stroke</li><li>■ More brake applications to close gap = less likelihood of dragging brakes when drum cools</li></ul>
Haldex® AA1	375	15	
Meritor®	350	12	
Bendix® Versajust® GS™	62	45	
Bendix® Versajust® LS™	29	35	

Table 1

\*Source: Bendix testing data

- Reduces fuel consumption
- Mitigates dragging brakes
- Lowers maintenance costs by reducing the need for “brake adjustments”

Reduces fuel consumption by at least **1.5%\***

Saves you money by extending lining life by up to **16%** and drum life by up to **30%**

\* There are a number of factors that contribute towards fuel consumption as it relates to brake drag. Please consult a Bendix representative to discuss further.

The Bendix®  
Versajust®  
advantage.

Minimize dragging brakes.

Increase fuel economy.

Extend lining and drum life.

Optimize brake performance.



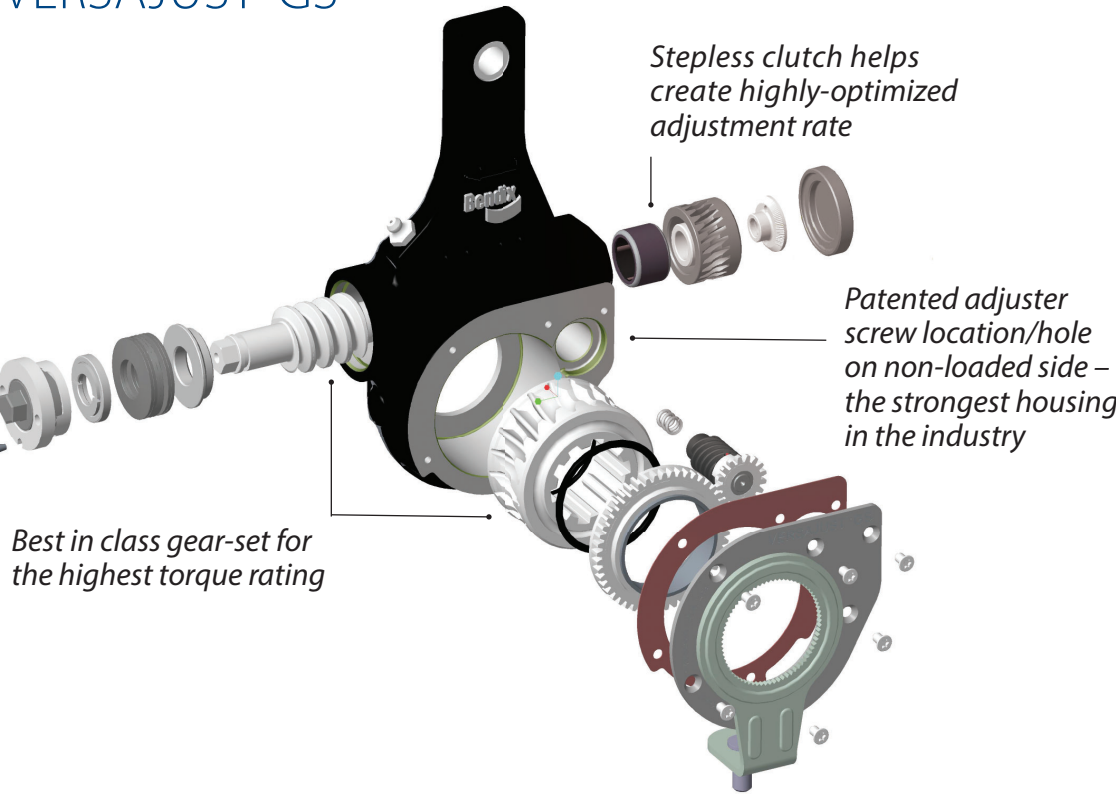
IT ALL ADDS UP.

Although they are all similarly shaped “black boxes”, slack performance varies greatly from brand to brand. For starters, there are various rates of adjustment – some are gradual and precise while others adjust much faster to an expanding drum.

Adjustment rate alone can have a big impact on brake performance, lining life and drum life, fuel consumption, and even chamber reserve stroke (which affects your risk of roadside inspection violations.)

The Versajust® advantage started with our link-style slack – Versajust® LS™, but now extends to applications that require a grounded-style slack. We’ve added Versajust® GS™ to our lineup. With our expanded portfolio, your fleet can continue to count on Bendix for all your slack adjuster needs.

VERSAJUST® GS™



VERSAJUST® GS™ SLACK ADJUSTER (Grounded-style slack)

Our grounded-style slack brings all the benefits of Versajust LS to vehicles that cannot normally package an LS slack. This slack is well suited for refuse, transit, other severe duty vocations, and high-axle load applications.

- Grounded slack allows varied arm angles and multiple offsets
- Optimized adjustment rate compared to competitor slack adjustments
- Patented body design for increased durability in higher torque capacities
- Increased load rating (23,000 in-lbs.)
- 6-year /1 million-mile line haul warranty\*

And in cases where fleets need both link-style and grounded adjusters, the availability of the GS simplifies parts management and streamlines maintenance for increased uptime.

\* See Warranty document BW7212, available on the online Document Library at b2bendix.com for complete details.