Gabriel® HD

THE ORIGINAL

Product Guide

TRUCK TRAILER AND BUS SHOCKS

BILLION-MILE VERIFIED QUALITY PROVEN DURABILITY IN REAL-WORLD USE

www.gabriel.com

EXPERIENCE, COVERAGE AND DURABILITY...

Decades of experience deliver results.

- FleetLine® and GasSLX® HD product designs have been **proven** on- and off-pavement for over five decades
- Gabriel products have been tested and improved over time based on real-world use and increasing demands
- FleetLine® and GasSLX® deliver the **results** you expect — mile after mile, job after job

Unmatched coverage.

- Gabriel Truck, Trailer and Bus shock **coverage** is unmatched in the HD aftermarket industry
- Extensive FleetLine® and GasSLX® product lines cover more than 3,000 OE part numbers and more than 2,000 competitors' aftermarket part numbers
- Gabriel exceeds its nearest competitor's listed offerings by more than 50 percent in total

Gabriel is your one stop supplier for:

- ☑ Coverage
- ☑ Durability
- ☑ Super-finished Chromed Piston Rods
- ☑ Best-In-Class Hydraulic Stop
- ☑ Cab Shocks
- ☑ Extreme Heavy-duty Applications
- ☑ Horizontal Applications
- ☑ Adjustability
- ☑ High Temperature Fluid
- ☑ Gas Cell

HEAVY-DUTY SHOCKS FOR CLASS 3 - 8 TRUCKS, TRAILERS AND BUSES

FLEETLINE® AND GasSLX®

PROVEN — BILLION-MILE VERIFIED — QUALITY — DURABILITY — IN REAL-WORLD USE

Fleetline® Cab Shocks

Fleetline® Cab Shocks

Heavy-duty shocks specifically designed to improve comfort and reduce vibration in cab suspensions

- 1", 1 3/16", 1 3/8", 1 5/8" bore sizes to address all cab suspensions and designs

Fleetline® 83000 Series

83000 Series

A heavy-duty product designed for class 3 – 6 vehicles and heavy truck suspensions

- 1 3/8" bore
- 10-stage valving
- Self-compensating piston seal for consistent damping throughout the shock life

Fleetline® 85000 Series

85000 Series

A heavier-duty product designed for class 6 – 8 trucks, buses and trailers

- Larger 1 5/8" bore for increased durability
- Bulged design* for increased fluid capacity and cooler operation in extreme conditions
- Self-compensating piston seal for consistent damping throughout the shock life

GasSLX® 89000 Series

89000 Adjustable Series – GasSLX®

Premium, adjustable, heavy-duty gas shock for class 7 – 8 vehicles, school buses and transit buses

- Three position adjustability offers personal ride selection: regular, firm and extra firm
- Specially formulated H.T. fluid reduces friction and wear in extreme operating conditions
- Unique Gas Cell design double seals for superior gas retention
- 1 5/8" bore, forged solid steel eye rings and 360° arc-welded end mounts for superior durability

H.T. FLUID

SHOCKS AND STRUTS ALSO AVAILABLE FOR LIGHT TRUCKS

* 85300 Series and 85700 Series

PRODUCT FEATURES

Performance & Durability

Mist Reducing Rod Seal*

- Reduces misting
- Dirt wiper reduces contamination entering the shock
- Garter spring provides optimum rod sealing and seal life
- Gas check lip prevents "bleed down" of shock while parked, improving ride quality & consistency

NEW FEATURE

End Mount Anti-Corrosion Coating*

- Inhibits rust, prevents bolt seizure to mounting sleeve
- Reduces replacement downtime

NEW FEATURE

Super-Finished Chromed Piston Rods – The best defense against corrosion

- Inhibits rust, minimizes deterioration
- Keeps the piston free of debris
- Reduces the amount of wear on the seal
- Increases the life of the shock

Formulated Shock Oil

- Reduces fade**
- Carry heavier loads over rugged terrain for longer periods of time

* Most common applications
** In Gabriel Testing, http://gabriel.com/benchmark-testing

Heavy-duty durability — proven, through and through.

Best-In-Class Hydraulic Stop[1] – Gabriel is the U.S. originator of this uniquely robust hydraulic stop design

- Provides three to five times greater force absorption than largest competitor's design[2]
- Traps more oil volume and has better sealing capabilities than competitors' designs
- Improves ride control comfort and provides unparalleled system durability
- Significantly reduces fatigue in mounts, lights and other vibration-sensitive components

Eye Ring

End Mount

Super-Rugged Solid End Mounts – Providing extraordinary structural strength

- Tough as nails, solid steel eye ring with a 360° reinforced arc weld[4] rather than the more common split eye ring and two-place welding design
- Enhanced design allows for greater tensile strength[2]
- Exceptional bond between the eye ring and piston rod
- Superior structural integrity reduces end mount failures
- Built tough to withstand multi-directional flexing of today's suspensions

Durable Piston Seal Design – Self-compensates for wear

- Incorporates a rubber (or cast iron[3]) piston seal that adjusts to maintain a tight seal between the piston and the pressure tube
- Unlike many competitors' designs, Gabriel's design eliminates oil bypass and provides consistent performance over the shock life
- Increases control capabilities at low velocities

[1] Where required
[2] In Gabriel Testing, http://gabriel.com/benchmark-testing
[3] Dependent on designs
[4] Excluding 83000 series

BUILT RUGGED TO CARRY YOUR FLEET ACROSS ALL ROAD ENVIRONMENTS

Quality components, precision engineering and a durable, robust design ensure top performance throughout the life of Gabriel® heavy-duty shock absorbers, and reduce wear and tear on other costly suspension parts.

Drawn over Mandrel (D.O.M.) Inner Cylinder Tube

- Provides smooth surface on inner cylinder for piston seal and piston bearing face
- Less chance of scoring and better durability
- Higher tolerance on the I.D.

Super-Finished Chromed Piston Rods

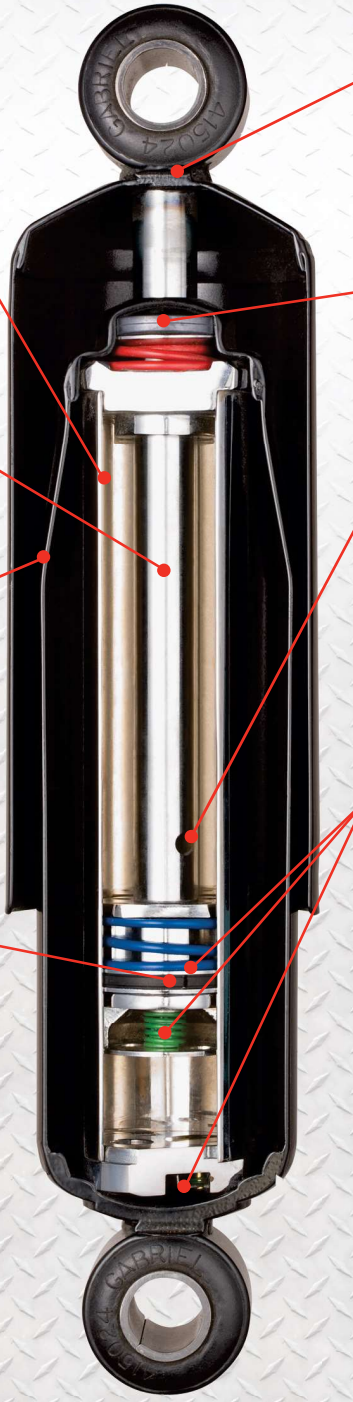
- Provides superior corrosion resistance, performance and product life

Bulged Design* *[2]

- Increased fluid capacity
- Lower operating temperatures
- Less internal wear due to heat dissipation

Pressurized, Floating Piston Seal Design

- Self-compensates for wear over shock life
- Rugged and durable design
- Less fade, more consistent performance over the full range
- Reduces force-velocity variabilities, increases control capabilities at low velocities



Forged Solid Steel Eye Rings and 360° Arc-Welded End Mounts*

- Greater tensile strength
- Reduces end mount failures

Triple Lip, Nitrile Rod Seal[2]

- Extra seal protection improves fluid retention
- Leads to longer product life

Hydraulic Extension Stop[1]

- Unique and robust design
- Prevents shocks from topping out and suspensions from over-extending
- Significantly reduces fatigue in mounts, lights and other vibration sensitive components

10 Stage All Coil Spring Valving

- For comfort and control
- Enhanced durability
- Self-cleaning

GasSLX® - Features the benefits noted above, **plus**:

- Adjustable - 3 positions
- Gas Cell - Separates gas from fluid
- Reduced fade
- High Temperature (H.T.) Fluid
- Multi-lip Viton Rod Seal

* Excluding some or all 83000 Series
* *Including 85300 and 85700 Series

[1] Where required. [2] Excluding GasSLX
Note: Features may vary by part number

GUIDE TO SHOCK INSPECTION

Reduce down time with regular maintenance.

Today's low friction class 3 – 8 suspensions require high functioning shocks to minimize wear and protect suspension components from vibration damage, tires included. Worn shocks also increase driver fatigue because they cannot properly dampen the suspension oscillation that gets transferred to the truck cab of today's sophisticated suspension systems.

A program of regularly scheduled shock absorber inspection and maintenance will help avoid down time and reduce wear on other components. In between these regularly scheduled reviews, watch for signs that wear is occurring.

Indications that maintenance may be required and shocks should be checked for replacement include:

- Uneven Tire Wear
- Ride Deterioration
- Excess Vibration
- Sagging Taper Leaf Springs
- Premature Wear
- Broken or Torn Air Springs

Signs that it's time to replace shock absorbers:

Leaking | Upper or lower mount broken | Upper or lower bushing broken | Broken internally or jammed in collapsed position | Improper installation | Dust tube broken | Truck mount failure | Bent or dented

Take the Heat Test

If ride deterioration is experienced and there is suspicion that a shock has failed internally, perform the following "SHOCK HEAT TEST" within a few minutes of operating the equipment.

Shock absorbers function at temperatures ranging from ambient to 350º F. Shocks dampen the oscillation of the truck's springs by transforming energy produced by the spring to heat and dissipating it. As a result, the shock should be slightly warm to hot to the touch after normal use.

1. Drive the vehicle at moderate speeds for at least 15 minutes.
2. All shock absorbers should be warmer than the chassis. Within a few minutes of driving the vehicle, touch each shock absorber carefully on its body below the dust cover or tube, after first touching a nearby part of the chassis to establish a reference ambient temperature of the metal. Note if shocks aren't warm.
3. Suspect failure in any shock absorber that is noticeably cooler than its mate on the other end of the axle. Different temperatures from axle to axle do not indicate failures, but cooler temperatures on any one axle does warrant removal and examination of the cooler shock absorber.
4. To inspect for an internal failure, remove and shake the suspected shock. Listen for the sound of metal parts rattling inside, which can indicate internal failure.

THE ANSWERMAN

QUESTIONS ANSWERED.

800.999.3903 | GABRIEL.COM

With the Gabriel® Answerman, you never get automated voices, just expert answers. If you have a question for the Answerman, call toll-free at 800.999.3903.

Gabriel® HD
THE ORIGINAL

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800.999.3903

For application, technical and product questions
Monday - Friday, 8AM - 5PM CT

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800.251.5932

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Monday - Friday, 7AM - 5PM CT

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