Why Gabriel®?

Fueled by durability. Driven by results.
No one understands ride control like The Original Gabriel®. In 1907, we created an entire industry around it. So, we understand better than most the challenges that fleet managers and operators are under to make sure their vehicles are ready to perform when called upon.

More heavy trucks than ever rely on Gabriel’s heavy-duty technology to get the job done because we have the best OE replacement coverage in the industry. But, we don’t just manufacture heavy-duty shocks and struts. We design and build a broader line of hardworking and durable shocks and struts than anyone else in the world.

Coverage - Unrivaled in the industry
No one else comes close to Gabriel coverage. Gabriel Fleetline® and GasSLX® offer more OE replacement coverage than any competitor in the heavy-duty marketplace.

So if you need it, Gabriel is your one stop supplier. Whatever you want...we’ve got you covered:

- Coverage
  - Extreme Heavy-duty Applications
- Durability
  - Horizontal Applications
- Super-finished Chromed Piston Rods
  - Adjustability
- Hydraulic Stop
  - High Temperature Fluid
- Cab Shocks
  - Gas Charge
Heavy-duty durability - through and through

From the superior tensile strength of every Gabriel® shock to the forged, solid steel, 360° arc-welded eye ring end mounts, Gabriel® builds durability into every Fleetline® and GasSLX® shock it makes. In Gabriel-designed tests, Gabriel outperformed the competition in tensile strength, mount weld strength and eye ring strength.

Quality - Gabriel super-finished chromed rods are the new gold standard

All chromed rods are not created equal and the finish matters. Gabriel uses a super-finished chromed piston rod on every heavy-duty shock it makes, because it offers the best protection against corrosion.

Gabriel super-finished chromed piston rods:
- Prevent corrosion
- Ensure proper seal lubrication
- Provide a more consistent wear surface
- Produce longer product life
Gabriel® keeps working long after the job is done
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.

1 5/8", Large Bore Design*
- Increased tensile strength
- Designed for more control
- Proven design for low friction suspensions

Forged Solid Steel Eye Rings and 360° Arc-Welded End Mounts*
- Greater tensile strength
- Reduces end mount failures

Super-Finished Chromed Piston Rods
- Provides superior corrosion resistance, performance and product life

Triple Lip, Nitrile Rod Seal²
- Extra seal protection improves fluid retention
- Leads to longer product life

Bulged Design**²
- Increased fluid capacity
- Lower operating temperatures
- Less internal wear due to heat dissipation

Hydraulic Extension Stop¹
- 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

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

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
Shocks for Class 3 – 8 Trucks, Buses and Trailers

**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

**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

**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
- Custom blended High Temperature (H.T.) fluid reduces friction and wear in extreme operating conditions**
- Self-compensating piston seal for consistent damping throughout the shock life

**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

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* 85300 Series and 85700 Series
** Where applicable

Ride the independent spirit™
Gabriel® Shocks
for Light Trucks

Ultra™ LT - Light Truck Shocks and Struts
Precision engineered for the ultimate in safety and performance for today’s light trucks, SUVs and vans. Equipped with G-Force™ technology, including:
- StableSteer™ Valving - Improves tire contact with the road for safety and control
- G-Force™ Piston – Sintered iron construction for durability and maximum shock performance

LTV™ Commercial Series
- The ultimate commercial-duty shock for fleet use
- Designed specifically for heavy-duty use on light trucks and vans
- Oversize 1 5/8" (41mm) piston bore with durable sintered iron piston and compression head
- Arc-welded end mounts for maximum strength

MaxControl™ Monotube Shock by Gabriel®
- For superior ride and handling for any light truck or SUV
- Larger 1 13/16" (46mm) bore for quicker reaction
- Single-tube design and multi-stage sealing to reduce chamber temperature and debris entry
- High pressure nitrogen gas and floating piston technology allow the shock to immediately react

Front & Rear Spring Assist (Load Carrier)
- Combines shock and spring technology
- Constant-rate front coil springs can help improve stability and restore or maintain ride height
- Variable-rate rear coil springs provide 500 lbs. per pair of load capacity. [Not to exceed vehicle GVWR (Gross Vehicle Weight Rating). Product does not increase payload]
- An economical solution for heavier-duty use

Steering Stabilizers
- Improves handling and control
- Provides added damping of steering system’s lateral motion
- Urethane bushings, premium high-performance fluid and fade-resistant foam cell

gabriel.com
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
Disposal Instructions

Appropriate protective measures, such as wearing safety glasses and protective gloves, should be taken when removing oil and gas from discarded and defective shock absorbers.

Procedure

1. Secure the shock absorber in a horizontal position. Fully extend the piston rod prior to drilling the unit. (see FIG. #A).
2. Using a 1/8" (3mm) drill bit, drill a hole in a downward direction approximately 1.0" (25mm) from the bottom of the shock absorber to a depth of about 1.0" (25mm) (see FIG. #B).
3. Drill a second hole of about 1/8" (3mm) at 2.0" (50mm) from the top of the shock absorber to depth of about 1.0" (25mm), in order to allow all of the oil to flow out.
4. By moving the piston rod in and out, begin stroking the unit to completely purge the oil from the cylinder of the unit (See FIG. #C).

Environmental Information

5. Collect all used oil, **being careful not to mix oil with any other waste or refuse**. Store the used oil in an approved container clearly marked “Used Oil”.
6. Dispose of the remaining shock body and internal parts in accordance with your local, state, or provincial legislation concerning waste oil and other wastes.
7. Store, dispose, and/or transport used oil in accordance with environmental regulations and used oil program regulations in your state or province.

Used shock oil may be disposed in the container used for recycling engine oils. Information on where to dispose of the oil and other parts can be obtained from environmental authorities or oil suppliers.
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.