RideTech 21150701

Ridetech ShockWave 7000 Series HQ Shock Instruction Manual

Model: 21150701

Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your Ridetech ShockWave 7000 Series HQ Shock. Designed for specific automotive applications, these shocks offer superior ride quality and durability. Please read this manual thoroughly before installation and use to ensure optimal performance and safety.

Figure 1: Ridetech ShockWave 7000 Series HQ Shocks. These are high-quality air suspension shocks designed for automotive use, featuring a robust black air spring and silver aluminum body.

Key Features

- **Single Adjustable Shock Valving:** Allows for precise tuning of ride characteristics.
- **Redesigned Internal Structure:** Enhanced performance and reliability.
- **Monotube Design:** Provides superior oil control for consistent damping.
- **Impact Forged Aluminum Construction:** Ensures leak-free operation and exceptional durability.
- **Wide Range of Applications:** Available in various stroke lengths and mounting styles to fit diverse vehicle setups.
- **24 Rebound Clicks:** Offers easy and precise valve adjustment.

Setup and Installation

Proper installation is crucial for the performance and longevity of your ShockWave units. It is highly recommended that installation be performed by a qualified automotive technician.

Pre-Installation Checks:

- Verify that the ShockWave units are compatible with your vehicle's specific application. Recommended for solid rear axles with a rear axle weight less than 1,500 lbs. Not recommended for IFS installations due to insufficient load capacity.
- Inspect all components for any signs of shipping damage.
- Ensure you have all necessary tools and safety equipment.

General Installation Guidelines:

1. Safely lift and support the vehicle on a level surface.
2. Remove existing suspension components as required.
3. Mount the ShockWave units securely using appropriate hardware. Ensure proper alignment and clearance.
4. Connect air lines to the air spring portion of the ShockWave. Use high-quality fittings and ensure all connections are leak-free.
5. Route air lines away from hot or moving parts.
6. Inflate the air springs to a preliminary pressure (e.g., 50-70 psi) to check for leaks and proper function.
7. Lower the vehicle and adjust air pressure to achieve desired ride height and comfort.
8. Perform a final check of all fasteners and connections.

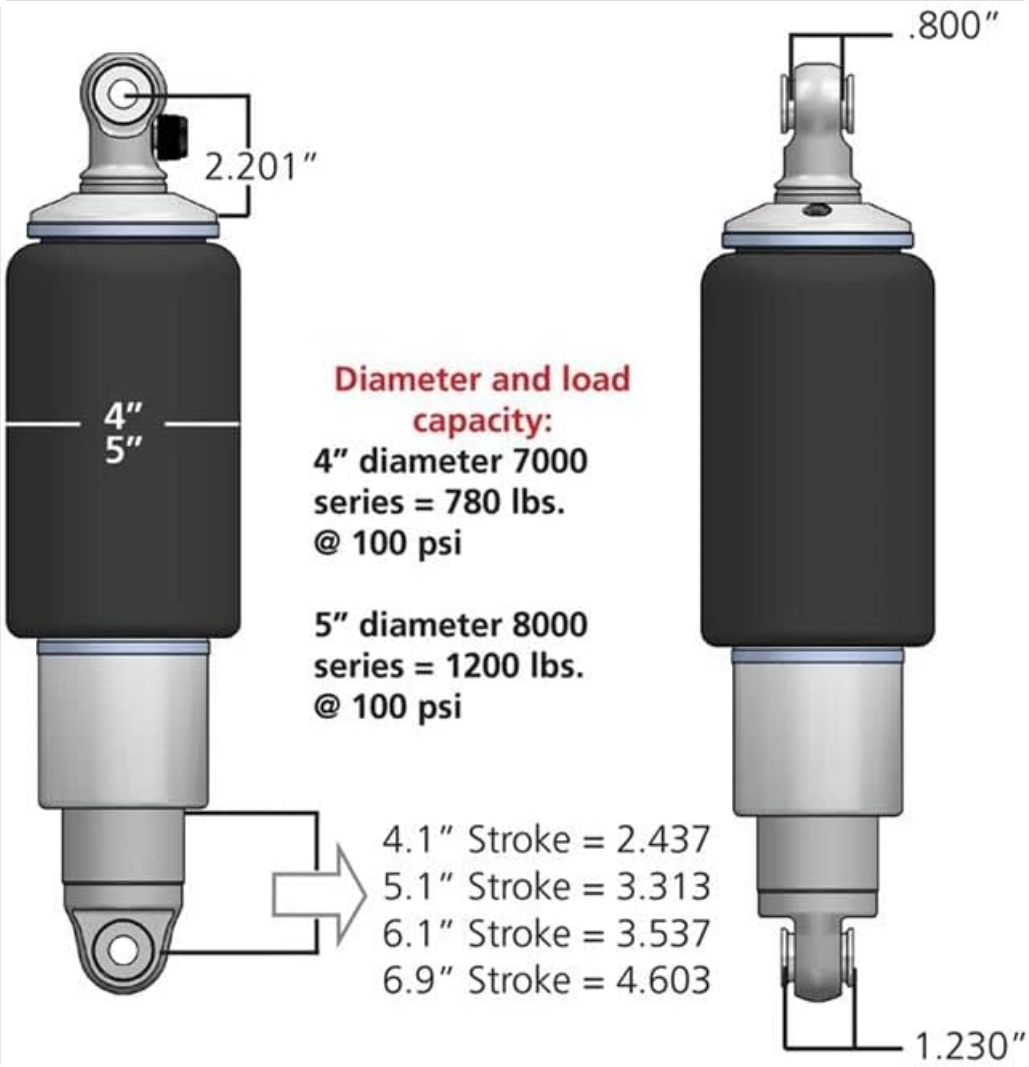

Figure 2: Technical diagram illustrating the dimensions and load capacity of the ShockWave 7000 and 8000 series. The 4-inch diameter 7000 series supports 780 lbs at 100 psi, while the 5-inch diameter 8000 series supports 1200 lbs at 100 psi. Stroke lengths and corresponding measurements are also detailed.

Operating Instructions

Air Pressure Adjustment:

The air pressure in your ShockWave units directly affects ride height and spring rate. Adjust pressure using an air compressor and a precise gauge. Always adjust both sides of the vehicle equally to maintain balance.

- **For Ride Height:** Increase pressure to raise the vehicle, decrease pressure to lower it.
- **For Ride Firmness:** Higher pressure generally results in a firmer ride; lower pressure results in a softer ride. Do not exceed maximum recommended pressure (100 psi for 7000 series).

Shock Valving Adjustment:

The HQ Series features single adjustable shock valving with 24 rebound clicks. This allows you to fine-tune the damping characteristics of your shocks.

1. Locate the adjustment knob on the shock body.
2. Turn the knob clockwise for a firmer rebound (more damping), and counter-clockwise for a softer rebound (less damping).
3. Start with a mid-range setting (e.g., 12 clicks from full soft) and adjust incrementally to achieve your desired ride feel.
4. Test drive the vehicle after adjustments to evaluate changes.

Maintenance

Regular maintenance will help ensure the longevity and optimal performance of your Ridetech ShockWave units.

- **Regular Inspection:** Periodically inspect the air springs for any signs of wear, cracks, or punctures. Check the shock body for leaks or damage.
- **Air Line Integrity:** Check all air lines and fittings for leaks, kinks, or abrasions. Repair or replace as necessary.
- **Cleaning:** Keep the shocks and air springs clean from dirt, debris, and corrosive materials. Use mild soap and water, then rinse thoroughly.
- **Fastener Torque:** Periodically check and re-torque all mounting hardware to manufacturer specifications.

Figure 3: An alternative perspective of the Ridetech ShockWave 7000 Series HQ Shocks, highlighting their robust construction and design. Regular inspection of these components is vital for optimal performance.

Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Vehicle not maintaining ride height / Air leak	Loose air line fittings, damaged air line, punctured air spring, faulty valve.	Check all air connections for leaks using soapy water. Repair or replace damaged lines/fittings. Inspect air spring for damage. Consult a professional if leak persists.
Poor ride quality / Excessive bounce	Incorrect air pressure, improper shock valving adjustment.	Adjust air pressure to recommended levels. Adjust shock valving (rebound clicks) to a firmer setting.
Uneven ride height	Unequal air pressure in left/right shocks, component binding.	Verify and equalize air pressure in both shocks. Check for any obstructions or binding in the suspension components.

Specifications

Brand	RideTech
Model Number	21150701
Series	ShockWave 7000 Series HQ
Auto Part Position	Rear
Vehicle Service Type	Truck
Material	Aluminum
Diameter (7000 Series)	4 inches
Load Capacity (7000 Series)	780 lbs @ 100 psi
Shock Valving	Single Adjustable (24 Rebound Clicks)
Item Weight	26.2 pounds
Product Dimensions	27 x 11.5 x 5.8 inches

Warranty and Support

Ridetech products are manufactured to high standards. For specific warranty information and terms, please refer to the documentation included with your purchase or visit the official Ridetech website. For technical support, installation assistance, or parts inquiries, please contact Ridetech customer service directly.
Note: Unauthorized modifications or improper installation may void the product warranty.