Shock Selection Guide

Radflo shock absorbers are available in a wide range of configurations. To select the most effective damper for your application you must consider several factors, such as vehicle weight, driving conditions and mounting compatibility. Use the information below to determine which options you need, or receive professional assistance from one of our suspension specialists by calling us directly.

TYPE: Each type of shock absorber serves a specific purpose. Choose the type that provides the features and functionality most important to you.

Non-coil shocks are customizable suspension dampers for race or recreation. They are available for all types of high performance automotive applications that accommodate universal-fit shock absorbers.

Coil-over shocks feature a threaded body and dual-stage spring mounting hardware. When optional coil springs are installed, you can adjust vehicle ride height, suspension preload and travel.

OE replacement shocks provide the quality and performance of a professional racing shock in a convenient factory-fit, bolt-on design. Perfect for upgrading aftermarket lift kits or factory shocks.

Bypass shocks offer the highest level of damping customization for the most demanding off-road racing conditions. Damping performance can be externally adjusted in a matter of seconds for immediate results.

Air shocks are an economical coil-over alternative that not only dampens, but also suspends your lightweight off-road vehicle without the need for additional springs.

Hydraulic bump stops are compact, secondary shocks that soften harsh suspension impacts caused by bottoming out.

SIZE: The diameter of the shock absorber body must be matched to the vehicle weight and intended use. Larger diameter shocks contain more oil for greater operating efficiency, as well as larger internal components and mounting hardware for strength.

2.0" Shocks are recommended for light weight vehicles (up to 5,000 lbs) and street applications. Multiple shocks per corner must be installed for heavier vehicles.

2.5" Shocks are recommended for medium weight vehicles (5,000 – 7,500 lbs) and recreational or racing applications. A single 2.5" shock is comparable in performance to dual 2.0" shocks.

3.0" Shocks are recommended for heavy weight vehicles (over 7,500 lbs) and professional racing applications. A single 3.0" shock is comparable in performance to dual 2.5" shocks.

RESERVOIR: The style of reservoir must be matched to the terrain and driving conditions. In addition to containing the highest volume of oil, external reservoir shocks dissipate heat much more effectively than internal reservoir shocks. This prevents overheating and ensures consistent performance when driving for extended periods in harsh terrain.

Emulsion shocks utilize a combination of oil and Nitrogen gas contained within the shock body. They are more economical than external reservoir shocks due to the simplicity of design. Emulsion shocks are ideal for light-duty or street applications, although not recommended for high speed driving in off-road conditions. They should be mounted as close to vertical as possible.

Internal floating piston shocks are identical to emulsion shocks with one exception. A floating piston located within the shock body keeps the oil and Nitrogen gas separated. This allows the shock to be mounted at an angle, and to perform more efficiently than emulsion shocks.

Piggy back shocks feature a fixed external reservoir for increased oil volume. An internal floating piston separates the oil from the Nitrogen gas, allowing the shock to be mounted at any angle with no detrimental effect on performance. Piggy back shocks are well suited for both street applications and off-road use.

Remote reservoir shocks benefit from a large external reservoir that offers the greatest oil volume. The fluids are separated by a floating piston which allows the shock to be mounted at any angle. Oil flows freely between the shock body and reservoir through a flexible high pressure hose, providing excellent heat dissipation.

Remote reservoir and piggy back shocks are the best choice for off-road vehicles that are frequently exposed to sustained high-speed driving in harsh conditions.

PISTON ROD: The piston rod diameter should be matched to the desired duty rating. A larger diameter rod will provide greater resistance to compression forces, although cost and weight will also increase.

5/8" Diameter rods are the standard size for most 2.0" shocks, and recommended for light-duty and street applications.