

Anti-Sway BarsWhen sway is an issue...



Does your motorhome handle like the Queen Mary? Does it pitch and roll with every gust of wind or passing semi, or list to port or starboard on the curves, or waddle over speed bumps, railroad tracks and driveways?

Well, it shouldn't. As a matter of fact, motorhomes (as well as SUVs, pickup trucks and vans) can be made to handle just like what they are — motor vehicles — with two aftermarket upgrades.

Upgrading your shock absorbers will control up and down motion. But the best shocks in the world won't affect side to side motion (the "Queen Mary effect," commonly called "body roll" or "sway") by one iota.

The solution to sway is in the suspension.

Adding a set of custom anti-sway bars to your suspension system will have the same effect on sway as a good set of shocks has on up and down motion — there's an immediate improvement in stability and tracking, especially on the curves.

For many motorhome owners, this is an empowering experience. What was beyond their control, just yesterday, is suddenly within it — cornering with confidence, quicker maneuvering, and a remarkably level ride over uneven terrain — all without launching the dishes out of the cupboard. And even after eight or 10 hours at the wheel, they arrive fresh, instead of fatigued. Which means they can start enjoying the Grand Canyon, the Grand Tetons, or the grandkids right away.

How could one component have such a dramatic effect?

Both stock and custom anti-sway bars are designed as a link between the suspension and the frame, and both use the weight of the axle as a brace against the chassis, so that pressure to one side of the motorhome (by weight shift, crosswinds, or passing trucks) is countered by the bar.

A custom anti-sway bar, however, is built to offer significantly more resistance to sway...

• Bigger is better — custom anti-sway bars have a thicker diameter than stock bars. Often, a quarter to three-eighths of an inch more. Each incremental increase in diameter has an exponential effect on performance — on average, torsional roll stiffness is increased by 30 percent with every 1/8" increase in diameter.

In plain English, the bar offers 30% more resistance to sway.

• A high-grade alloy — custom anti-sway bars are made of 4140

"chromoly" steel (a chrome and molybdenum alloy), which is considerably stronger and more durable than the standard spring steel (a 1020 grade) used in many stock sway bars.

• A better pivot point — all anti-sway bars pivot and rotate, in response to pressure shifts on the chassis. The bushings (one at each connecting point) are the pivot points, and also the points most vulnerable to abrasion.

Stock bushing are made of rubber, which hardens over time, making it more susceptible to abrasion. Rubber is also subject to corrosion, and additional wear, from petroleum products such as gasoline or oil, and from ozone in the atmosphere.

The more a stock bushing wears, the more the sway bar 'gives.' Over time, the motorhome leans farther and farther out of line, in response to the same load weights. That's what causes driver fatigue on big rigs — constantly correcting for excessive sway.

RSS bushings, on the other hand, are made of polyurethane, which has many advantages over rubber — polyurethane is impervious to gas, oil and ozone corrosion, is more resistant to abrasion, and doesn't buckle under heavier load weights.

RSS sway bar benefits

Improved handling • Increased stability • Reduced body roll
A safer and smoother ride • Combats crosswinds
Corner with confidence • Less driver fatigue
Improvement over factory standard equipment

Designed to fit specific

Class A & C Motorhomes • SUVs • Trucks • Vans

The proof is in the bar. The RSS anti-sway bar (to the left) has a larger diameter, a better grade of steel (4140 chromoly) and polyurethane bushings, making it much more resistant to sway.





RSS bar and bushing

Stock bar and bushing

REFLEX

Steering StabilizersWhen control is an issue...





The 'return-to-center' concept and how it works...

Take the spring from a ballpoint pen. Hold each end with a thumb and index finger and squeeze it toward the middle. Feel the pressure pushing your fingers apart? Now, gently extend the spring. Feel the pressure of the spring pulling your fingers back to the neutral position? That's what physicists call 'memory,' or the ability of a material to return to its original state.

Reflex Steering Stabilizers have a tempered steel spring secured at both ends to a specially designed and valved steering damper. One end of the stabilizer is attached to the tie rod, and the other end is securely fastened to the chassis undercarriage. When the steering stabilizer is compressed, the spring pushes back to the neutral position. When extended, the spring pulls back to the neutral position.

Benefits Reflex provides...

- Front tire blow out when you blow out a front tire, your vehicle will make an abrupt turn toward that tire, causing you to veer into oncoming traffic or off the road. The stabilizer reacts instantaneously to bring the vehicle back to center.
- Crosswinds and passing traffic works to keep your steering centered, and prevents oversteering to help control your vehicle more effectively.
- Road fatigue helps you stop fighting the steering wheel for control. The stabilizer keeps the steering wheel centered — not you.
- Rut tracking ruts cause you to oversteer. With the Reflex Steering Stabilizer on board, your reactions become easier, eliminating overcompensation when steering out of a rut.
- Road edging when your tire drops off the edge of the pavement, it can startle even the most careful driver. The Reflex Steering Stabilizer keeps you going straight — helping you control the RV until you're back on the road.
- Pot holes and debris with the Reflex Steering Stabilizer in place, the motorhome will stay straight and go in the direction you want, even when you bounce through a pot hole or other dangerous road condition.

DAVIS TruTrac[™] When tracking is an issue...



Does your motorhome vibrate from side to side? Are "wandering," "rut tracking" and "lazy steering" a problem? Tired and fatigued trying to keep in line going down the road?

Davis TruTrac bars link

the chassis to the front axle, eliminating excessive axle side play, without affecting normal up-and-down suspension travel. The result is precise, predictable handling. The benefits are an immediate improvement in both vehicle performance and safety, as well as increased driver comfort — more positive control means less driver fatigue.

Each TruTrac bar comes complete with all mounting hardware, and installs using pre-drilled factory holes — no drilling or welding required. They will not interfere with any factory original equipment, or affect any factory warranty.

Davis TruTrac bars are available for Ford F53 (V8 and V10), and all Workhorse motorhome chassis (W16, W18, W20, W22 and W24), Freightliner front engine diesel chassis (FRED), as well as Kodiak 45/5500 chassis. Davis TruTrac bars are cadmium-plated and come with polyurethane bushings for maximum stability and longevity.

What do our customers say?

"I noticed a difference as soon as I stepped into the motorhome — there was no rocking movement. During a recent trip we encountered substantial crosswinds. With the **RSS anti-sway bar**, I estimate our motorhome's sway was reduced by 90%. We don't feel anything now when a tractor trailer blows by us. I'm 100% satisfied; everyone should experience the benefit of this product."

Johnny Singleton - Myrtle Beach, SC

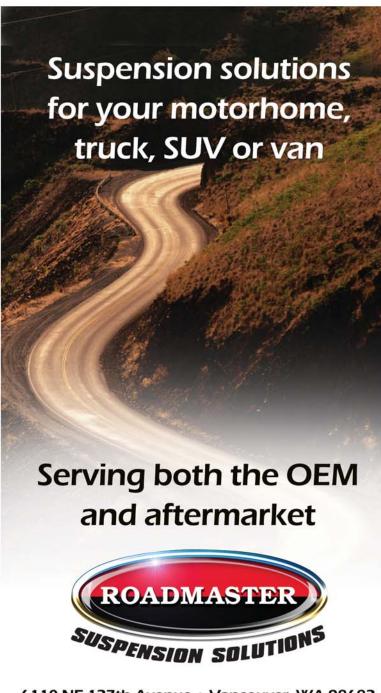
"I had a **Reflex Steering Stabilizer** installed, and the difference was night and day — my class C motorhome handles like a sports car. The stabilizer keeps the steering centered, no matter what the road throws at me. Ruts, bumps and hairpin curves are no problem. My steering wheel doesn't belong to potholes any more. It belongs to me."

Jerry Miller, Portland, Oregon

"My F53 chassis would vibrate so bad that it shook the whole motorhome. The only way to stop the vibration was to slow down to 20 mph — which almost got me rear-ended twice. Finally my wife told me, 'I'm not riding in that motorhome any more.'

A mechanic told me about **Davis TruTrac** bars. I had one installed and the vibrations stopped immediately. I drove that motorhome for another 150,000 miles (with my wife back on board) and it was solid as a rock. Buying that Davis TruTrac bar was the best move I ever made."

John Kielty - Reno, Nevada



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We're the suspension experts

Very few people would say they bought their motorhome (or truck, van or SUV) for the suspension. For most of us, the suspension is out of sight and out of mind — even though your driving performance, safety and comfort are all riding on those components.

Unequal weight distribution, worn or inadequate components, excessive axle side play or a higher center of gravity can quickly overpower a stock suspension, even in everyday driving. Unfortunately, finding a solution can be as frustrating as dealing with the consequences.

Do you need a custom suspension component?

Every "yes" to the following questions is a "yes" for an anti-sway bar, a steering stabilizer and/or a trac bar...

- · Does the vehicle "roll" when cornering?
- Does driving for an extended period of time leave you physically exhausted?
- Is your rig all over the road can't keep it between the lines?
- · Would you lose control if one of the front tires blew out?
- · Does the steering wheel have a mind of its own?
- Do passing trucks and crosswinds rock your vehicle back and forth?
- Is driving a 'white knuckle' experience?

The primary benefits of ROADMASTER suspension components are...

- Anti-sway bars virtually eliminate 'body roll' (the vehicle rolls from side to side, especially during cornering). Anti-sway bars stabilize the vehicle, which keeps it level through crosswinds, as well as dramatically improving overall handling.
- **Steering stabilizers** front tire blow out protection. Stabilizers also automatically compensate for oversteer caused by pot holes, rut tracks and other unfavorable road conditions.

• *Trac bars* — drastically reduce 'wander' (the steering feels loose, making it difficult — and physically exhausting — to keep the vehicle in a straight line).

Each of these components will protect your vehicle (improved tire life, reduced suspension wear, reduced maintenance costs and improved vehicle performance) and protect your family (better driving control, reduced driver fatigue, more control in evasive maneuvers, and improved driver confidence).

Every ROADMASTER suspension component...

• ...is designed as a custom fit, for a specific chassis. ROADMASTER engineering designs take into consideration chassis and axle manufacturers' specifications (your warranty will not be affected).

Which component is right for you?

ROADMASTER designs, engineers and manufactures anti-sway bars, trac bars, and steering stabilizers for both original equipment manufacturers and the aftermarket. Anti-sway bars, trac bars and steering stabilizers work in concert with the other components of your suspension system to add stability and control.

Each of these components has a specific role to play.

The graph on this page identifies the primary benefits of aftermarket suspension products. Each one has value — for a specific application. It's important to understand and identify what you're experiencing, so you can select the correct product solution.

Suspension solutions

Handling problems	Shock Absorbers	Air Bags	RSS Anti- Sway Bar	Bell Crank	Davis Tru Trac Bar	Generic Steering Dampener	Reflex Steering Stabilizer
Bouncing	Х						
'Porpoising' (up and down movement)	Х						
Rough Ride	Х	Х					
Sway and Body Roll			Х				
Soft Steering			Х	Х	Х	Х	Х
Wind Buffeting (crosswinds, gusts and passing 18-wheelers)			Х		Х		Х
Wander				X	Х		Х
Rut Tracking					Х		Х
Blow Out Protection						Х	X
Load Leveling		Х					

There are several components that make up a good vehicle suspension system: shocks provide comfort; air bags support weight; anti-sway bars control left-to-right sway; trac bars reduce 'wander;' and steering stabilizers provide blow out protection. Use this chart to make an informed, educated decision about what aftermarket suspension product(s) will enhance your vehicle's stability, handling and maneuverability.