

# ROADMASTER ACTIVE SUSPENSION

## SAVES FUEL & REDUCES TIRE WEAR!

IT'S TRUE! If you haul load, tow an RV or trailer, or transport several people in a multi-passenger van, RAS will reduce your fuel consumption and extend your tire life.

**SAVE 5% AND MORE AT THE PUMPS!**

**T**ests prove it and so have our customers. Roadmaster Active Suspension (RAS) is so effective as a load absorbing product it actually **helps correct the negative effects load has on fuel economy and tire wear.** Test results vary greatly due to amount and position of load, road and driving conditions, vehicle type and 101 other factors, but the bottom line is: **When operating with 1/2 or more G.V.W.R. payload, RAS improves fuel mileage by a minimum of 5% and extends tire life by a minimum of 15%!**

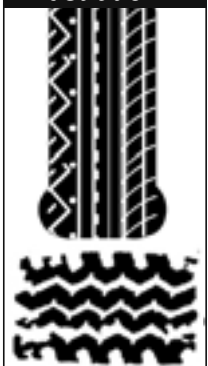
### Here's the how and why:

When a vehicle with rear leaf spring suspension is loaded the arch of the springs are reduced. Additional weight will ultimately cause the rear of the vehicle to sag. When this vehicle is in motion the now compromised rear suspension can no longer fully absorb and dissipate the load. Furthermore, the undulating road surface will compound the problem, reducing even more the leaf springs ability to support and absorb. Unable to dissipate (in part or whole) via the leaf springs, the force of the load will transfer to axle, wheels and ultimately a large percentage to the rear tires. This causes the sidewalls of the tires to continually flex and bulge in the area where the tires make contact with the road. This tire

bulging at road surface creates a continuously changing improper "footprint" (**Illustration A**), similar to a deflated tire, and that increases roll resistance. Increasing roll resistance makes the engine work harder and hence the vehicle burns more fuel.

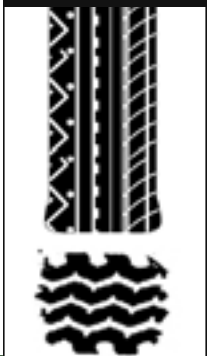
When Roadmaster Active Suspension is installed the rear leaf springs are supported by two variable rated coil springs, thereby converting a **passive** system to an **active suspension** system. These **extremely powerful coils** are the key to our success as they not only assist the leaf springs in supporting load and stabilizing the vehicle but also when strain from load is applied, a stabilizing action (unique to RAS) comes into effect immediately, **absorbing** the force of the load. On undulating road surfaces, RAS controls the rate of deflection of the leaf springs again absorbing and dissipating the energy. The consequence of this continuously 'absorbing and dissipating load force' action is a controlled discharge of energy through the leaf springs, axle, wheels, and tires creating an improved balance between the tires and road surface contact. The result is a more proper and consistent tire to road footprint (**Illustration B**) and vastly reduced roll resistance... the key to considerable savings.

Illustration A



IMPROPER  
FOOT PRINT

Illustration B



PROPER  
FOOT PRINT



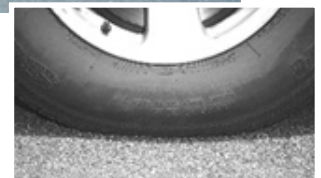
BEFORE (at right) AND AFTER (at left) ILLUSTRATIONS SHOWING THE ADVANTAGE OF ROADMASTER ACTIVE SUSPENSION

### WITH RAS

Decreased roll resistance for improved fuel efficiency

### WITHOUT RAS

Excessive tire bulging with increased roll resistance



Read what Business Owners have to say about Fuel Savings... scroll down to the next page

# Read What RAS Customers Have To Say On The Subject Of Fuel Savings



**16.4% Savings!**

**Gean Reed**  
**Mecklenburg Fleet & Automotive, Inc**

As a garage owner I have seen a lot of products come through the front door... I have a 2005 Ford F-350 dualie with a 6.0L diesel automatic trans 4wd truck that I occasionally use to pull my 38' 5th wheel travel trailer. I was getting 12.8 miles per gallon... Well to my surprise I was getting 14.9 miles to the gallon after installing the (RAS), **that's a 16.4% increase**. Also my truck was 1/2" lower on the left side before installing (RAS), but now it is exactly the correct ride height according to Ford for my vehicle specs... Well 3 weeks later we have become Charlotte NC #1 Roadmaster Active Suspension dealer, what a great product this is.



**12% Savings!**

**Phil Richter**  
**Contractor FedEx Ground**

As a FedEx Ground Contractor and owner of a Dodge Sprinter Van, I just want to let you know that with the Roadmaster Active Suspension system now installed on my vehicle, it has not only greatly improved the load carrying and handling of my van, but also makes my van feel much safer... Body roll has been virtually eliminated... The van used to rock back and forth resulting in cargo shifting on the side shelves,... (RAS) eliminated all these problems. Best of all I am saving money... tire wear has definitely reduced... I am now also **saving on average 6 gallons of fuel per week** (Approx. 12% fuel Savings)



*Note: At current fuel prices, with an average savings of 6 gallons of fuel per week, the money saved by this business owner will pay for his RAS system, installation and taxes included, in about nine months. For as long as he operates this vehicle after that, his RAS investment **will pay him dividends**, in the form of money saved, every time he visits the pumps.*

Scroll down  for a few more clips



## 2.7% - 9% Savings!

**Steve McKee**  
**ServiceMASTER Clean** (Franchise owner)

After installing Roadmaster Active Suspension kits on half our Van and Pickup fleet vehicles, we noticed a tangible improvement in fuel saving over a three months period. Overall **we experienced a range from 2.7% to 9% in gas savings**, with an **overall improvement of 6%**. We were so impressed that we now have (RAS) installed on all our fleet vehicles. We are now able to carry heavier loads with improved stability, even when towing. Based on the data (RAS) provided, I am confident that we will see improved tire ware and lower maintenance costs. I also now have peace of mind knowing that with the Roadmaster Active Suspension system installed on our vehicles we have improved the safety features of our fleet.



## 11% Savings!

**Joe Daro**  
**Absolute Off Road**

After installing... 1998 Dodge Ram 2500 4x4 with Cummins Turbo Diesel, I am thoroughly impressed... The truck had a front to rear bucking motion when unloaded that was really noticeable on flat roads at speed... Normally during towing (trailer with jeep) on level ground I would see between 750° - 900° EGT, with about 12 - 16 lbs boost. (After installing)... the bucking was gone!... The truck no longer squatted down when loaded up and at the same speed, same trip, same load, my EGT gauge was showing a 150° - 200° lower reading... Resulting in an **(11%) decrease in fuel**.



**THE PATENTED RAS IS BY DESIGN; THE ONLY LOAD ASSIST PRODUCT ON THE MARKET THAT WORKS ON A COMPLETELY DIFFERENT 'HORIZONTAL PRINCIPAL' TO SUPPORT THE REAR LEAF SPRINGS AND AS SUCH, IS THE ONLY PRODUCT THAT WILL ACHIEVE THESE FUEL SAVINGS.**

NOTE: Reducing roll resistance and harmful flexing and bulging of tires results in extended tire life.

The Ultimate Leaf Spring Suspension Assist!

# ROADMASTER

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