



1541 Reynolds Rd. Charlotte, MI 48813

P: 517.543.6400

**SPARTANMOTORS.COM**

## **Spartan Motors Commences Production of Intelligent Suspension System (ISS)**

March 18, 2002

CHARLOTTE, Mich., March 18 /PRNewswire-FirstCall/ -- Spartan Motors, Inc. ([NASDAQ:SPAR](http://NASDAQ:SPAR)) announced it has turned an important corner in motorhome suspension technology -- and that means smoother rides for RVers.

The Charlotte, Mich.-based manufacturer of custom chassis and emergency vehicles has begun production of motorhome chassis equipped with Spartan's intelligent suspension system (ISS) for the 2003 model year. Fleetwood Enterprises, one of the top RV manufacturers, has partnered with Spartan and is offering the ISS -- which is exclusive to Spartan -- on some of its 2003 American Eagle luxury line of RVs at the Family Motor Coach Association show, which opens in Perry, Ga. today.

ISS is designed to provide motorhome owners with improved cornering and handling by continually adjusting to the configuration of the road. Using a combination of hydraulics, electronic sensors and computer control, the ISS provides a tight, level and smooth motorhome ride under all conditions.

"Our engineers are constantly working to improve the systems that control the handling and performance of the motorhomes that use Spartan platforms," said John Szykiel, president and COO of Spartan Motors. "Never before has a motorhome been able to handle turns and changes in driving conditions so well. ISS improves ride and handling all of the time, not just when you need it. The difference ISS makes is immediately noticeable on a test-drive. ISS should significantly improve both Spartan and Fleetwood's position in the RV market."

Engineers designed the ISS as a way to fine-tune the suspension settings of a coach, giving the driver greater confidence in the ride. ISS features a real-time electronic system that takes the guesswork out of the ride equation by "reading" the condition of the road and responding to control the roll, pitch and vehicle stability to provide the best ride possible, making it both proactive and reactive.

The ISS roll control system eliminates vehicle sway by applying the precise amount of force between the motorhome's chassis and the suspension system to keep it level through turns and lane changes, as well as on windy days. This force -- which can be much higher than the conventional suspension allows -- allows the motorhome to corner smoothly in every instance.

When the motorhome's brakes are applied quickly, ISS applies anti-pitch control to maintain the vehicle's flat plane from front to back. In current models, shock absorbers and anti-sway bars do little to keep the motorhome from pitching forward in the case of quick braking. With ISS, forward lean is eliminated.

"The ISS is replacing ride-control technology that hasn't changed in decades," Szykiel said. "The old systems -- which are essentially shock absorbers and anti-sway bars -- could be tuned to only one setting, and engineers had to guess at what would be a comfortable compromise between a bumpy ride with little sway, or a smooth ride with a lot of sway. By comparison, ISS continually monitors the road and vehicle conditions, and the result is a smooth, level ride that is unparalleled in the RV industry."

By integrating ISS in its motorhomes, Fleetwood is now two generations ahead of its competitors in the suspension system arena. The I-beam axle system in place at other manufacturers is a technology that has been in use for 75 years. Fleetwood already uses the independent front suspension system pioneered by Spartan in 1995.

With ISS, Spartan continues its leadership position in the field of chassis technology, an integral part of the Company's competitive strategy to remain a high-performance product provider. Spartan's exclusive rights to ISS means the technology will provide Spartan with a 24- to 36-month head start on any competitive offerings. Demand for ISS, which the Company introduced at the Recreational Vehicle Industry Association show in Louisville during the first week of December, was so great, that Spartan has begun production just four months later.

"Over time, we intend to use the ISS in all of our product lines, including our emergency vehicles," Szykiel said. "In every market in which we compete, ride and handling are a critical part of the vehicle selection process. This has the potential to be an even more dramatic change to industry technology than the advent of anti-lock brakes."

#### About Spartan Motors

Spartan Motors, Inc. (<https://theshyftgroup.com/>) is a leading developer and manufacturer of custom platforms for recreational vehicles, fire trucks, ambulances and other specialty vehicles. The Company also owns fire and rescue vehicle manufacturers Luverne Fire Apparatus, Quality Manufacturing and Road Rescue, Inc.

Source: Spartan Motors, Inc.

Contact: Mary Ann Sabo or Ben Buursma of Lambert, Edwards & Associates, Inc., +1-616-233-0500, or [mail@lambert-edwards.com](mailto:mail@lambert-edwards.com) , for Spartan Motors, Inc.

Website: <https://theshyftgroup.com/>