



## **Letter from Bilstein Representative Jim Hiland:**

October 2013

Dear Sportsman Modified Racer:

Wish I could be with you today to meet you and tell you what a great opportunity you have to compete in a truly affordable Modified division. Please let me tell you why Bilstein shocks are the right choice for the RUSH Sportsman Modified Series.

In 1954, Bilstein patented the mono-tube gas shock design that is today the fundamental model of shock design for all high performance cars in the world. Today, almost 60 years later, Bilstein is still the world's leader in the manufacture of mono-tube gas shocks.

Working as a representative for Bilstein since 1990, I was able to help U.S. Legend Cars Intl., manufacturers of the Legend car, make the switch to a Bilstein "sealed" spec gas shock in 2000 from their former spec shock company. Throughout the years questions of shock alterations after the purchase and questions of inconsistency in production line tolerances had led many Legend teams into making large investments in shock absorbers in order to be competitive in a series designed for budget racers. The switch to the Bilstein "sealed" spec shock ended all of those problems and today questions about shock alteration among Legend car racers rarely occur, and when they do are easily resolved.

In the beginning, well funded teams bought dozens of the new Bilstein "sealed" spec shocks seeking to find an advantage in valving variations as with the old brand; but finding none, finally settled into buying just four shocks for each car with a couple of spares.

In an early sales presentation to the management at U.S. Legend Cars, then called 600 Racing, I told them that with the Bilstein program they would sell fewer shocks. They responded that it was more important to hold down cost and sell less shocks in order to keep car counts up. The result has been that competitors spend far less money on their shocks than in other series. In 600 Racing no one has an advantage because they are on a "shock deal", can afford 50 shocks, or employs a "shock specialist". These sane principals will be applied to the new RUSH Sportsman Modified Series.

Here's why our spec shock program works, when others don't.

No other shock company can match Bilstein's high tolerances in a production line shock. Our production line in Hamilton, OH just north of Cincinnati, is robotic and your shocks are untouched by human hands. Hundreds of individual one-part number shocks are built during a single production run and there is no possibility of a "one-off" shock being built there.

The “stake” that secures the piston nut on the end of the rod and the "crimp" that secures the rod guide in the shock are made using thousands of pounds of hydraulic force and cannot be duplicated by human hands. Once done, the external crimp cannot be undone. The shock body would have to be cut apart, the body welded back together and refinished to be undetectable to the eye, then the shock would have to be reassembled on a “fill machine” and the external “crimp” reproduced identically. Even if all of that could be done (and it can't), the cheated valving would be easily detected in dyno testing.

Racers and officials connected with Legend car racing have been amazed at the extensive performance life of Bilstein racing shocks. That's because Bilstein valve shims are made from high grade long memory spring steel. Our competitors use shims that may be shiny but lack the memory of Bilstein stacks. A 10-year-old Bilstein shock at a recent Legend Dirt National event traced right over the template during tech, even though the owner claimed the shock has been in hundreds of races. You can bend and break them, but you'll have to race them for many years in hundreds of races to experience any shim stack fatigue.

Here's why the RUSH Modified shock rule works to eliminate large shock budgets for even the top teams.

No other racing shock company can duplicate Bilstein consistency with a production line, sealed/crimped, tamper-proof shock, sold at a budget price. In other sanctions, competing companies have lobbied for their shocks to be legal using an external gas port. This immediately opens the door for custom valving and valve stack replacement due to shim stack fatigue in other brands, this diverts money that could be used for tires, pit passes, and tow money to the pockets of custom shock builders. Bilstein sealed crimped shocks absolutely lower the costs and levels the field in the area of shocks.

The package we have chosen is designed to allow the cars to be drivable and well handling in any condition. All three valvings have been Bilstein standards for Northeast dirt Modified racing for decades, winning hundreds of track and series championships.

Here's one more point. In the absence of a spec shock rule; from street stocks to the World of Outlaws, the guys on the smallest budgets chip in to buy shocks for the teams with the biggest budgets.

Here's what I mean. For top teams; shocks are often free; but somewhere down the line, the shock company must pay for those shocks. Guess who pays? Of course, it is the budget racer, the guy who's not on a “shock deal”. In the RUSH Modified Series, your shock budget will be an absolute minimum because you only have to buy four shocks and a couple of spares and your shocks are affordable because no one is on a “deal”.

Thank you for your time. Know that I look forward to working with the RUSH Sportsman Modified Series, its racers, and promoters to development an affordable dirt modified program that can be successful throughout western and central Pennsylvania and eastern Ohio for many years into the future.

Sincerely,  
Jim Hiland  
Bilstein of America Inc.



## **RUSH Sportsman Modified Bilstein Sealed Shock Set-Up Sheet**

### **Basic Set-Up:**

RF: RUSH 162-55  
LF: RUSH 162-55  
RR: RUSH 208-72  
LR: RUSH 208-72

### **Heavy/Tacky Track Set-Up:**

RF: RUSH 162-55  
LF: RUSH 162-55  
RR: RUSH 162-90  
LR: RUSH 208-72

### **Slick Track Set-Up:**

RF: RUSH 162-55  
LF: RUSH 162-55  
RR: RUSH 208-72  
LR: RUSH 162-90

*The RUSH 162-55 is a 7" stroke shock. Both the RUSH 208-72 and RUSH 162-90 are 9" stroke shocks.*