

OUTLAW DIESEL SUPER STOCK CLASS

To: Outlaw Diesel Super Stock Competitors

From: Doug Roberts, OTTPA CEO

Subject: Future of this class with OTTPA

The heavy Diesel Super Stock class is one of the most popular tractor classes in pulling and really only NTPA and OTTPA offer this class. It has always been an expensive and high maintenance class since the late 90s, but that pace has really escalated the last 5 years or so. In NTPA it is on a pace that is not sustainable in my opinion and I want Outlaws to put a limit on this class now before we get to that point. After gaining on the average number of vehicles at our events for three years in a row, we went backwards this year. In 2015 we had 17 different DSS tractors participate at Outlaw events with 10 taking points and 4 in the "Pull-off for the Championship". With 18 hooks we had a 7.5 average of vehicles for the year and 3 times had at least 10 vehicles at an event. At five events we had 8 vehicles and had 6 vehicles or less at 5 events. Only one time we had 4, which was the lowest turnout all year and that was at the stand alone event in West Liberty, IA on a Thursday. I had high expectations for this class this year and almost even raised the purse for 2016. Good thing I didn't as I would have had a lot of explaining to promoters with our turnout this year. When I say we went backwards, I am talking about almost half with a 4.1 average of vehicles at the first 15 hooks in 2016. The highest turnout was at Wisner, NE with 7 vehicles. We had 2 hooks with 6 vehicles, 4 hooks with 5 vehicles, 4 hooks with 4 vehicles, 4 hooks with 3 vehicles and 1 event only had 2 vehicles. Only 2 vehicles qualified for the "Pull-off for the Championship". This is totally unacceptable for our promoters and fans.

With that said, I have been talking to different engine builders the last couple of weeks, along with NTPA and Outlaw competitors to get a feel for what needs to be done to make this a reliable class in OTTPA for years to come. I started pulling a 3 turbocharger, 3 stage Diesel Super Stock back in 1978 and ran it in the 5,500, 7,500 and 9,500 lb. classes. The old setup of an air research TOA8 on the bottom, T18A40 in the middle and T18A90 on top. Probably had 150 lbs. boost at the most and mainly because we had heads that didn't flow very well or wouldn't have had that much. No one had girdles on the blocks. As turbos improved along with water injection and then Holset turbos came along with 4 turbos in 3 stages things started going south in the mid 90's as far as breakage and high maintenance. I have thought about how to put

limits on this class in OTTPA the last few years, but most of the limits I thought would work will not now. Things such as pumps, turbos, waste gate or pop off valve, cubic inch, etc. Some of the first tractors to lift the heads off of engines were the Allis Chalmers engines then International and finally John Deere. Max Simpson in 1998 came up with the idea of putting restrictor plates in front of the top two turbos or one top turbo. At that time billet crankshafts had only been out 4 or 5 years and no one had tie down systems to hold head to girdle and this was way before recast or billet blocks were even an idea. Hypermax had come out with the thicker poured heads to help the red tractors. Max Simpson might have been ahead of his time then with the restrictor plate idea but I think that is the best way to limit the horsepower in this class now. Most of the Outlaw tractors now are where NTPA was about 5 years ago. Most OTTPA competitors have about a 4.1 to 4.25 turbos on top and from the ones I talked to in both NTPA and OTTPA this should be in about that 3000 to 3200 horsepower range. This is as much horsepower as I want to see in this class to keep these vehicles on the track at Outlaw events. The sled will just take out a weight or run a different gear and we will go just as fast and as far in the same amount of time. There will be good entertainment for our fans as they would rather watch 10 to 15 tractors with 3000 horsepower than just 3 or 4 with 4000 horsepower. These limits also lead to more multiple winners and that makes for a healthy class. With our sweeps and multi-hook events it is not fair to the promoters on the end of these sweeps as very few are left running. It is easier to fix a class before it is completely broke and we need to fix this class before it is too far gone to bring it back. It will get to the point where I cannot sell this class to our promoters.

When you look at the history of OTTPA this is the only tractor class without limits and it is beginning to show. If we do this right and put limits on this class in 5 years I think we will have 10 to 15 tractors going to every event with an average of over 10 tractors per event and a \$5000 purse. As examples, if you look at our USS class just 8 years ago it was going backwards and hit a low point in 2010. It was down to just 7 hooks, and only one tractor going to every hook with 3 running for points. When it gets that low with only 7 hooks, competitors do not want to pay a \$550 membership to join. We did have one option to fix the USS class that the DSS class does not have and that was let the rules go and let any tractor we could get come to the pulls. We let over cubed and also overhead cam tractors participate from NTPA and PPL heavier USS class hook. We also let them know that when the numbers get better they would not be able to hook as at that point they would be a detriment for the class to continue to grow with some tractors having an unfair advantage. When I told my promoters, yes

the numbers have been bad but we are making changes to make it better they worked with me and booked the class. Now 5 years later this class is doing great with many events having 10 tractors and a high at one event with 13 tractors.

Another example is our Pro Stock Tractor class as without limits it was about done as the numbers went down when better pumps and turbos came out. They were lifting the heads, breaking blocks, cranks, rods, etc. and rolling in bearings every three hooks. The 5 inch turbos also weren't reliable at that time and a lot failed and put parts in the engine. All these things lead to less and less tractors for three years in a row until in 2007 we were down to just 8 tractors and 4 running for points. In 2008 we put a turbo limit on the class to keep the breakage down and now we have the best numbers ever in the class with 16 tractors and 3 new ones being built. This also led to more even and fair competition as all these tractors but one has won an event in the last 3 seasons. In the last three years we have had no major breakage in this class because of the limits we put on this class and that is with over a dozen tractors making 20 to 30 hooks a year. We have had OTTPA competitors that would run 30 hooks a year with our turbo limit and have no problems then put on a bigger turbo and go to Louisville and break their engine. Now about half of our competitors have all the latest and greatest stuff like head hold downs, etc. and none have had major breakage when doing that.

The biggest problem is when technology comes out with better parts like billet heads, billet or recast blocks, billet cranks and rods, head tie downs, etc. to fix a maintenance problem then it is followed with bigger turbos and pumps until the same parts break or something else breaks. That is a vicious cycle to be on and is not sustainable and numbers will go down as less and less can afford this, especially with this soft ag market we have now. Even if you could afford it the amount of work to keep these tractors on the track is also not sustainable. With limits on these classes like our Pro Stock and hopefully Diesel Super Stock class the competitors do not have to buy the billet blocks, crankshafts, heads, etc. and can get by on that budget and be competitive. The competitors that choose to buy the better parts do not have a competitive advantage just a maintenance advantage. That is why I have been for all these aftermarket products as they keep vehicles on the track and especially if you are running for points.

When you look at ways to put a limit on these Diesel Super Stock tractors I once thought waste gates or pop-off valves might work, but with everyone running them in different stages and now boost is actually lower as better heads and turbos come out

that will not work. When it comes to turbos, it used to be years ago in NTPA they had a rule that 4 turbo tractors could not hook at regional pulls. Now the 3 turbo setups in two stages run better or as good as the 3 stage with 3 or 4 turbos. One rule I saw in the NTPA rule book that you can be 650 cubic inch if you run a 3 turbos system. Not sure where that is coming from as no DSS should be that big of cubes and with the 3 turbo system as good or even better than the 4 turbo system. If that system works then that will lead to all DSS having to have a big block John Deere engine. The pullers from NTPA I talked to as the turbos went up from 4.25, then 4.3, then 4.4 and now 4.5 and 4.6 the fuel pumps have went to 2000 cc, then 2300 cc and now 2600 cc pumps and the engines can't take it. And these upgrades of turbos and pumps are about \$30,000 each time. There just is not enough competitors going to keep up that pace and then deal with the extra maintenance that goes with it. The last Grand National hook for DSS in Michigan only had 3 Grand National tractors taking points. This is what I want to avoid in OTTPA and why we need a limit in this class.

With that said we can put a limit at 4.1 or 4.25 turbos on top but that is hard to tech as just like in other classes we went to box turbos because of what you can do to modify that turbo. Just like in the 2.6 Diesel truck class with most of them running a big frame turbo and bigger wheel behind the 2.6 map ring. I do not want a box turbo or turbos for any of our Super Stock classes and the best way is to put a restrictor plate in front of turbo. The map ring will still do its job and if we go with a 4.1 restrictor hole on the top two turbos rather they be 2 stage or 3 stage it will still limited the horsepower. That is 26.4158 square inches and if you run one big turbo on top with either 2 or 3 stages it will be a 5.8 restrictor hole which is 26.4314 square inches. Pullers can keep and experiment with different turbos to see if a 4.1, 4.25 or even bigger turbo will suck more air through that restrictor plate. Once you put an air limit on the class there will not be a reason to buy bigger pumps and keep upgrading turbos and that is a major cost to be competitive every year or so. In the end we will have more even horsepower, less breakage, more even competition that will lead to multiple winners and a healthier class. All of these things lead to more vehicles on the track and that is what our promoters and fans want. Just like the USS class if I tell my promoters we are working to make this class better with rule changes they will work with me and book this class. If we do nothing and have another bad year then it will be tougher to sell this class to our promoters. Thanks, Doug