

Current Clutch Setup Discussion

Posted by AgRacer - 24 Nov 2014 18:04

While I know its rule change season, I don't think this is one that is ready for a serious proposal but rather due for a discussion. I'm placing this here for future consideration and to document my findings during my clutch project last summer. I feel like if I put this in the Rule Change thread, it will muddy the waters there. Read at your own risk.

Another rule change that I have been contemplating over the last 6 months since my clutch change has been the allowance of a turbo clutch setup and/or aftermarket pressure plate. This stems from the fact that you can no longer buy any of the clutch kit parts separately from Sachs, they sell the kit only for 944/S/S2. If you wanted to install a new clutch setup with aftermarket race disc, you would have to buy the full sachs clutch kit leaving you leftover with a stock sachs clutch disc when the job is done.

Aftermarket pressure plates, like the full metallic ones sold by Spec or Clutch Net (not the billet/hybrid models), are just reassembled Sachs units with varying spring rates for increased clamping force. No immediately perceived weight change although I cannot verify. Performance could increase with increased clamping force.

Allowing the turbo setup (must use turbo bellhousing), allows us to use any properly splined, flat plate clutch discs of which compatible units have been found commonly stocked at local parts stores (off Mitsubishi's and Ford Rangers, etc). Downside is you have to source a turbo flywheel/bell housing/pressure plate to benefit. I have verified that there is no change in weight between the two setups, but the inside/outside radius of the clamping surfaces do change as this eliminates the recessed into flywheel clutch design.

Lastly, we've seen failures of the rubber centered clutch disc, but most of those have been eliminated from use on both street and race cars. A few have experienced failure of the stock sachs spring centered disc at the sheet metal tabs between the disc and sprung hub. Allowing this change would make it easier to use a 4 or 6 puck race disc that would eliminate this point of failure completely.

This research stemmed from wanting to put a new pressure plate in with a race disc from clutch net. Due to the offset plane design of the N/A clutch setup from the early rubber clutch discs, ours cost more to make and require retooling of the machines increasing the cost over a 944T clutch and requiring special order build times. I have not investigated purchasing 944T pressure plates only from Sachs to know if this changes. Maybe the solution is to allow all metallic aftermarket pressure plates.

Ultimately, I don't think this is that big of an issue as of yet to warrant a change, but I wanted to document my findings.

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Re: Current Clutch Setup Discussion

Posted by joeblow - 24 Nov 2014 18:15

From memory the weight will actually be more with the turbo clutch. So in this case you can take the slight weight disadvantage and run a turbo set-up with the reduced long term costs or stay with the standard 944 stuff. This seems a reasonable option for long term longevity of the class as parts become harder to source. I tend to like opening up parts selection when there is no real performance change but more parts sourcing options. I say yes...

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Re: Current Clutch Setup Discussion

Posted by tcomeau - 30 Nov 2014 10:36

We don't do standing starts.

We only have 140 HP.

Installing anything but a stock, SACHS, spring centered clutch disc and pressure plate is a waste of time and money. One new clutch assembly should last the entire lifetime of a 944 Spec race car.

I think this rule should be tightened to "Only stock, SACHS clutch kits allowed."

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Re: Current Clutch Setup Discussion

Posted by joeblow - 30 Nov 2014 10:52

You are assuming that these cars ONLY run 944Spec which I think is not true. The way things have been going I would not be surprised if the availability of the sport set-up becomes limited too. I for one have an aftermarket disc that costs me \$30 to re-line...that is pretty cheap compared to a new Sachs disc if you could buy just the disc that is.

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Re: Current Clutch Setup Discussion

Posted by Timwold - 30 Nov 2014 18:55

Tim C-

Unfortunately the yahoos in Texas did run standing starts. One of the reasons I shied away from NASA Texas. I don't think they are using standing starts anymore in the Texas NASA but they did.

I am neither for or against the proposal just stating there have been standing starts in 944's and it was a bad idea.

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Re: Current Clutch Setup Discussion

Posted by AgRacer - 30 Nov 2014 20:13

Timwold wrote:

Tim C-

Unfortunately the yahoos in Texas did run standing starts. One of the reasons I shied away from NASA Texas. I don't think they are using standing starts anymore in the Texas NASA but they did.

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I think that was because the then regional series director was a former CMC guy and it seems like thats the only kind of start they do. They didn't do any the year I joined in 2012 however. We did one for fun in the SE Region this year but its not something that is ever talked about as a regular thing.