

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 Mitsubishis 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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