

Need some tranny advice

Posted by spec944#74 - 06 Apr 2009 05:37

Hi guys,

I ran at FIR this weekend with SCCA and during morning practice on Sunday I lost 3rd gear in the new tranny some chiseler sold me as low mileage. I won't mention the name of who that was but it rhymes with Borbach.(Just kiddin' Cliffie). Anyway, I came out of the tower turn and shifted from second to third and the motor just freewheeled. I pulled it into neutral and putt then tried to put it back in third and it freewheeled again. I put it into 4th and motored down the front straight for a while and then tried third again and it went in and then popped right back out. After that there just wasn't anything there.

A guy at the track that builds a lot of spec cars had a spare tranny with a short fifth and a welded diff that he not only sold me at a very reasonable price, he helped me swap it into to my car in time for me to make the race. I have to say that I really struggled with driving with the open diff compared to my LSD, but my main question is what to do with my old tranny. It has a factory LSD and a short fifth, but don't know if I should: A. Just sell the fifth and LSD B. Pull the welded diff and put in the LSD C. Have the tranny with the LSD rebuilt and keep the tranny with the welded diff for a spare, or D. None of the above. Obviously I don't know how bad the LSD tranny is other than the obvious problem with third gear, so I would appreciate some advice about how to proceed. All opinions are welcome.

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Re:Need some tranny advice

Posted by 944sracer - 08 Apr 2009 11:34

To throw in some pennies here:

A tranny rebuild/refresh at a local porsche specialty shop with a mechanic who is arguably the best porsche mechanic I know runs \$700 Labor + the parts you need. As I don't really price him due to his skill level I do not know if this is high or low but I do know he quotes book time. You can use this as a ball park for cost. His name is Mark at RSR motorsports and most of the PCA racers use him. I highly recommend him if you could guess hehehe

probbaly out of your way to get trans here though but just a thought

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Re:Need some tranny advice

Posted by joepaluch - 09 Apr 2009 00:21

spec944#74 wrote:

Doug Nelson did the welding so I have a little more confidence in it that if it was a Joe special, but I really don't like the way the thing feels, particularly in tight corners like the tower turn at FIR. I'm going to have Jim Fluckey take a look at it and either have it rebuilt or pull the lsd and put it in the one I bought from Doug. Unfortunately I won't get that done by this weekend so I'll have to run the welded diff. I was about 1.5 secs a lap slower with that tranny on Sunday over running my lsd on Saturday, but I hope I can improve that with a little practice.

Good idea,

Steve... Honesly the welded diff is not the best option. I tend to believe it can be slight faster than open, but comes with increased risk of damage due to poor welds and due to the extra strain on the components mostly from turning in the side wheel in really tight turns.

Now a 1.5 sec increase in lap times is probably due to 2 things. 1) Your lack of familiarity with the diff. You will need to drive it different to take advantage of the 100% lock up all the time and to minimize its weaknesses. I have never driven with one so I can't say how, but it should add understeer everywhere. 2) you would need to adapt the set-up to accomodate this. Right now you have the car dialed in for an LSD so it is not perfect for the welded one.

So I believe if you worked on 1 and 2 you could gain back much of that 1.5 seconds. However in the end I feel it inferior to a good LSD anyway. So the best for you could be to keep the car as is and get the LSD back together and install it back in when you can.

Just so you know I have with and open diff because I never wanted weld my diff and suffer reliability issues that could come with it.

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Re:Need some tranny advice

Posted by Big Dog - 09 Apr 2009 11:49

One of the biggest issues with a locker is to complete your transition of braking, shifting and letting the clutch out before turn in. If you have not completed that, the car will try to step out if you have the least differential in engine speed and wheel speed. Trail braking is out as well.

Good luck and change it over as soon as you can.

Big Dog

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Re:Need some tranny advice

Posted by spec944#74 - 09 Apr 2009 13:58

Big Dog wrote:

One of the biggest issues with a locker is to complete your transition of braking, shifting and letting the clutch out before turn in. If you have not completed that, the car will try to step out if you have the least differential in engine speed and wheel speed. Trail braking is out as well.

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Big Dog

Boy, you got that right Jim. I usually trail brake pretty deep into turn 1 at FIR and it got really squirrely on me, and like Joe said it understeered like crazy in the tight tower turn. I guess I'll try to dial in some oversteer to counteract that but with the way that thing wants to step out I'm not wild about that idea either. I am definitely going to do something different one way or the other. What I hope is that my lsd is still good and I can drop in in the new tranny. Doug said he has gone completely through the one he sold me and it is solid, so it would seem to be a good candidate for a transplant.

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Re:Need some tranny advice

Posted by wild4a914 - 10 Apr 2009 02:32

Gee steve I'm really sorry about the transmission,,are you sure you didnt bust it when you left that donut on my car??

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