## Common Questions (Muscle Cars/Sport Truck)

#### **Manual Transmissions:**

Compare a Gear Vendors behind a Muscle Car 4speed to a late model 5 or 6 speed tranny swap (ie: Tremec TKO 500/600, BorgWarner T56, Kiesler, Classic 5 etc).

It is just unbelievable to us here at Gear Vendors that anyone would take out their Muncie M20/21/22, BW T-10, Ford Top Loader, or Mopar 833 4 speed and put in a 5 or 6 spd instead of adding a Gear Vendors.

Just look at the ratios. All the late model manuals were built to satisfy CAFÉ legislation by the EPA. Having an ultra low 1<sup>st</sup> gear and a tall overdrive gear can get a late model small fuel injected motor the best epa rating by say 1mpg over performance gears – but do we really want to give performance acceleration the boot over 1mpg. A Gear Vendors overdrive is worth say 22-30% better mpg with a .78 ratio that we can have with better performance all the time. Does anyone with a muscle car really want to give up performance by going all the way to .68 or .55 as the only overdrive gear? Not anyone we know. Ask any Corvette or Viper owner with a 6spd manual how much they really use that gear and they will tell you that they rarely use 6<sup>th</sup> gear as it is just too long legged for any performance and is only worth a tiny bit of economy when compared to their .82 or .75 gear of 5th.

The typical 5speed sold to muscle car guys also has CAFÉ gear spreads - such wide ratios that shifting from 1<sup>st</sup> to 2<sup>nd</sup> is like you shifting your close ratio trans from 1<sup>st</sup> to 3<sup>rd</sup> (skipping 2<sup>nd</sup> completely). Plus, all the late model 5spds went for a gear between what would be 5<sup>th</sup> and 6<sup>th</sup> netting a tall overdrive gear that has your engine lugging unless fuel injected (and if you are not fuel injected this can be a problem as carburetors need good vacuum to work properly).

#### A) Performance:

Gear Vendors offers more performance compared to 5spd or 6spd - Compare the ratios: This is why some 5spd sites do not even show you the full ratios just the equivalent 1<sup>st</sup> gear and 5<sup>th</sup> gear rpms.

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Typical CAFÉ 5spd (example: Tremec, TKO-500)
1<sup>st</sup> 2nd 3rd 4th 5th
3.27 1.98 1.34 1.00 .68
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40% 32% 25% 32% These ratio spreads mean that at 4,000 rpm shift point you would drop a minimum of 1600rpm on a 1-2 shift. That is like shifting a close ratio trans all the way from 1<sup>st</sup> to 3<sup>rd</sup> (skipping 2<sup>nd</sup>). Good for CAFÉ fuel mileage because a fuel injected motor can bump quickly into these ratios for some benefit to the city test cycle mileage numbers. Plain and simple a fuel injected motor in a brand new car has a lot of sensors to get away with this and does the best epa while lugged to death – not good for performance – ever.

TKO – 600, 600RR, T56-0011 & T56-Viper all still have very wide ratios compared to a close ratio muscle car trans. The closest is the T56-0011 and it is 2.87, 1.89, 1.28, 1.00, .82. That is still a huge jump on the first to splits and it is their weakest trans rated at just 400ft lbs of torque.

Gear Vendors behind both a wide ratio and close ratio trans results in close ratio performance (example here is the M20 and the M21 but holds very close to this for the T-10, Top Loader, and 833 Mopar as well).

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Muncie M21

1<sup>st</sup>/direct 1<sup>st</sup>/over 2<sup>nd</sup>/over 3<sup>rd</sup>/over 4<sup>th</sup>/over

2.20 1.71 1.28 1.00 .78
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22% 25% 22% You can use a full throttle clutchless shift from the Gear Vendors at any moment you want – for illustration here we used it on 1<sup>st</sup> gear and then left the overdrive on through the rest of the gear changes. You could use it on 2<sup>nd</sup> and up when boulevard cruising or 3<sup>rd</sup> and up etc.

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Muncie M20 wide ratio 1^{st}/direct 1^{st}/over 2^{nd}/over 3^{rd}/over 4^{th}/direct 4^{th}/over 2.52 1.96 1.46 1.14 1.00 .78
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22% 25% 22% 12% 22% The M20 (and all wide ratio T-10, TopLoader etc.) without a Gear Vendors had been less desirable because of the 1.46 3<sup>rd</sup> to 1.00 4<sup>th</sup> spread in gearing. Now as you see in the chart if you turn on the Gear Vendors at anytime before you get to 4<sup>th</sup> you get the same ratio spread as the close ratio M21 and M22 and 6 forward ratios you can use.

Hang on to your M20 because with a Gear Vendors it is one of the baddest combinations out there and nearly identical to what you will find in T-10, Top Loaders, and Mopar 833's. Notice that the Gear Vendors makes all these transmission slightly closer in overall ratio to 4<sup>th</sup> when you want that tight m21 type rpm.

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T10 stock ratios 2.20, 1.64, 1.31, 1.00 with GV on in first 2.20, 1.71, 1.28, 1.02, .78 Ford Toploader 2.32, 1.69, 1.29, 1.00 with GV on in first 2.32, 1.80, 1.32, 1.01, .78 Ford wide ratio 2.78, 1.93, 1.36, 1.00 with GV on in first 2.78, 2.17, 1.51, 1.06, .78 Mopar A833 2.44, 1.77, 1.34, 1.00 with GV on in first 2.44, 1.90, 1.38, 1.05, .78 Mopar A833 2.65, 1.91, 1.39, 1.00 with GV on in first 2.65, 2.07, 1.49, 1.08, .78
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# B) Power Handling:

The muscle car years of the Muncie, BorgWarner, Ford T&C, and Mopar transmissions were all about performance. These transmission's not only had close ratio spreads to keep the motor in the powerband for acceleration but also had strong cases to handle the powershifting and high horsepower of big block motors in heavy cars. When you drive one of these tranny's you never get the idea that it is fragile - you feel like you could break the welds of the competition plus shifter before you ever hurt the trans. Even today, here at Gear Vendors we get calls from owners who have never had a problem with their factory muscle car trans after 25 years or more abuse. This is exactly why Nascar still uses these 4spd transmissions today and why Gear Vendors makes our kits to fit what are in our opinion the best transmissions for the muscle car owner. If you need even more hp handling ability than your current muscle car trans then Gear Vendors also makes our overdrive kits for Jerico Racing Transmissions (Ford Top Loader), G-Force South/Tex Racing Transmissions and Richmond Gear (Super T-10), Lenco Racing Transmission (planetary manuals), G-Force, Liberty, and Richmond Gear drag race 5 spds (where 5<sup>th</sup> is direct drive). For parts and service on original transmissions in your muscle car: Dan Williams Top Loaders (TN), David Kee Top Loaders (TX), Passon Performance (Mopar 833), T&B Transmission (Muncie M20/21/22 BW-T10).

Equipped with a Gear Vendors, the muscle car 4spds now have new performance and economy. Yes, you will get our .78 overdrive ratio so your 4.10 rear gears will cruise like a set of 3.19 or your 3.55 will be 2.77 final in overdrive – very nice – that is 28.6% faster. But when you want performance nothing can match a Gear Vendors in a drag race or for acceleration on the street. Take off in 1<sup>st</sup> and hit the button on your shifter at full throttle (or let our AutoLaunch circuit do this for you) and the Gear Vendors will grab a full clutchless shift. This is right when the automatic guys are typically blowing by the manual equipped car – but not with a Gear Vendors clutchless shift available.

This feature is not just for 1<sup>st</sup> gear. Any gear where you start to accelerate, the fastest 1<sup>st</sup> shift is the most valuable and that will be overdriving the gear you are in at the moment – clutchless. No – you don't have to let off the throttle or blip the throttle – keep the throttle nailed and hit the button. Nothing is faster.

The reason a Gear Vendors can handle extreme horsepower and full clutchless shifts is because of very high dollar componentry and high tolerance manufacturing and its planetary design. Our product is commonly in 2,000hp applications that would literally grenade any other overdrive trans. It would not be cost effective for GM, Ford, or Dodge to build such a high hp handling

overdrive when all the 5 speeds were behind small v6 and v8 motors. Even a Dodge Viper gets a big weight break compared to our muscle car era Impalas, Torino's, and Chargers. A Gear Vendors overdrive is the most expensive overdrive you can buy. But they are built to outlive the car. This is why a 10 year old Gear Vendors will still bring 1500+ dollars on eBay.

# C) Reliability:

There is only one time it is fun and enjoyable to work on the transmission in your muscle car and that is when you are adding a Gear Vendors and all its benefits of overdrive and clutchless performance. Gear Vendors believes that you only want to work on your powertrain once, get it right, get it done. If you put in some weaker transmission that saves you a couple dollars, it is all for not if you ever have to work on it again.

Get the best, get it done, and enjoy the best performance and reliability with a Gear Vendors.

#### D) Overdrive Economy:

Don't get us wrong – overdrive is fantastic in your car. This is why pretty much everyone who makes an overdrive transmission can point you to rave reviews from their customers – you gotta have overdrive. Just realize that those reviews are not from big horsepower and track abuse. Gear Vendors maybe costs too much if you don't already own a muscle car 4 speed tranny now. This is because a muscle era 4speed costs new about the same as a 5or 6 speed – by the time you add a Gear Vendors we know it is a pretty big number. But if you already own the 4speed you can have the best overdrive for very little extra money compared to a 5 or 6speed and have all the performance benefits and far easier installation to boot. If you have big horsepower and some drag slicks – you have no choice – Gear Vendors and a quality 4speed is the only thing that will live so the decision is easy.

All our products come with a 30 day money back guarantee (so you know you will be happy about everything you receive and how it installs and drives or your money back) and a 2 year unlimited horsepower and abuse warranty (so you are guaranteed even on the race track).

Get one - you will love it.