GEARHEAD'S

Quickchange Exchange

11958 Davisburg Rd. Davisburg, MI 48350

CARE AND FEEDING OF YOUR NEW QUICK CHANGE REAR END

RATIO SELECTION

This is the fun part for a Gearhead. You probably chose your first ratio based on what you thought you would need. Now, you may want to make some adjustment or maybe you just want to smoke the tires till they go flat. If you want to fry the hides just get the lowest gear available put the big one on the top and do it.

If you are fine tuning, here is the procedure:
Drive down the road at a constant speed in high gear. Choose a speed that you would like to be able to accelerate from without shifting. Look at the tachometer (you did put a tach in it didn't you?)

Step down on the throttle and see if it pulls steadily. If you break the tires loose or the reaction is too violent, you need taller gears (lower number). If it feels like you put your foot in a bucket of oatmeal you need to drop the gear (higher number). How much change is needed is determined by repeating the procedure at a different speed, lower speed if you need more gear, higher speed if you need less.

When you get the right feel note the tach reading again. From this you have determined the RPM that the engine likes to cruise at. Now, take the RPM at your desired cruising speed and divide it by the RPM that the engine likes. This will give you a ratio.

Example:

RPM @ desired cruising speed	2550	= 1.159	(ratio change needed)
RPM that engine pulls from	2200		

Now take the ratio and divide it into your present overall rear end ratio.

Present gear ratio	4.56	= 3.93	new gear ratio
Ratio from above equation	1.159		

Let's reverse this just for the heck of it.

RPM @ cruising speed	2200	= .863	(ratio change needed)
RPM engine likes	2550		
Present gear ratio	4.56	= 5.28	(now there's a gear)
	.863		

If you need help, you can call us and we will use our computer to help you select your optimum gear ratios. We will need desired RPM, desired MPH, and tire size (either circumference or diameter) and any transmission ratio other than 1:1 (like overdrive).

Thanx again,

Gearhead

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