LIMITED SLIP (TORQUE SENSITIVE DIFFERENTIAL)

Use in applications where both tires have equal traction such as dry pavement. Both tires need equal traction in order for the clutches to lock-up. This clutch type limited slip is recommend in light to medium weight street vehicles where one wants posi-action and long clutch life, without adverse handling effects.

Because this unit does not have clutch preload springs, the clutch plate life is greatly extended because when you are coasting around a turn, the clutches are not wearing against each other. When accelerating in a straight line, the clutches are engaged (torque sensitive) and you get the posi-action. Benefit: On an equal traction tire surface, you have a posi when you need it, and you get extended clutch life when you don’t need the posi-action. If a customer jacks up the rearend and rotates 1 tire, the other tire will typically turn the opposite direction, as with an open differential. The Limited Slip has no adverse handling effects.

GENERAL INFORMATION

Torque Sensitive Differential units require Ford Friction Modifier (4oz bottle) – This reduces the chance of clutch chatter when going around turns. If clutch chatter still occurs, we recommend driving approximately 10 figure 8 patterns in a parking lot. This will help break-in the clutches and promote the distribution of the friction modifier across the clutch plates for smooth operation.

“Torque Sensitive Differential units use a combination of alternating steel and friction clutch plates, like in an automatic transmission.” The Limited Slip Torque Sensitive Differential does not have the clutches under spring tension. The springs helps “lock” the axles together for traction to both wheels by exerting pressure on the clutch discs, but the alternating clutch plates allow sufficient slippage during cornering without noise. Once both wheels have the same amount of traction, the Limited Slip is effective. Though the traction is split to both rear wheels, slippage can still occur, especially as the clutches wear or the springs lose tension. If doing a burn-out and 1 tire loses traction (for example: water under 1 tire) while the other tire has better traction, you can potentially “glaze” the clutches which will hurt future posi performance. This unit is not recommended for drag racing.