

## INFORMATION

P-21-C

## Pennzoil® Automotive Gear Oils: In A Nutshell

Gear oils and their various applications can be confusing. To assist you in choosing the correct gear product, we've put together a table of information on our gear oils. This table includes gear products for passenger cars, SUV's and light trucks. For information related to heavy duty truck and bus applications, see bulletin P-60 Pennzoil<sup>®</sup> Commercial Gear Oils: "In a Nutshell".

Pennzoil® Product	Type/Characteristics	Applications
Pennzoil® Synchromesh Fluid	<ul> <li>Unique fluid – not API rated</li> <li>Approximate Grade ~SAE 80W</li> <li>GM Spec 9985648</li> <li>Chrysler Spec MS-9224</li> <li>Mineral base oils</li> </ul>	<ul> <li>⇒ Manual transmissions and transaxles calling for part #'s:</li> <li>&gt; GM 12345349 or 12345577</li> <li>&gt; Chrysler 4874464</li> <li>⇒ Contains special friction modifiers</li> </ul>
GL-1 Manual Transmission Fluid SAE 80W-90 (formerly 409 Mineral Gear Lube)	<ul> <li>API GL-1 (no EP additives)</li> <li>Grade SAE 80W-90</li> <li>Mineral base oils</li> </ul>	<ul> <li>⇒ Manual transmissions and transfer cases on a few pre-1990 vehicles</li> <li>⇒ Not for differentials</li> </ul>
Gearplus® SAE 80W-90 GL-4	<ul> <li>API GL-4 (typically 1/2 the EP additive of API GL-5 gear oils)</li> <li>Grade SAE 80W-90</li> <li>Mineral base oils</li> </ul>	<ul> <li>⇒ Manual transmissions in moderate duty service</li> <li>⇒ NOT INTERCHANGEABLE WITH GL-5 GEAR OILS</li> </ul>
Pennzoil <sup>®</sup> Synthetic SAE 75W- 90 GL-4	<ul> <li>API GL-4 (typically 1/2 the EP additive of API GL-5 gear oils)</li> <li>Grade SAE 75W-90</li> <li>Synthetic base oils</li> </ul>	<ul> <li>⇒ Manual transmissions in moderate duty service</li> <li>⇒ Helps eliminate "cold shifting" problems sometimes experienced with SAE 80W-90 mineral oils</li> <li>⇒ NOT INTERCHANGEABLE WITH GL-5 GEAR OILS</li> </ul>
Multi-Purpose 4075 Gear Oil	<ul> <li>API GL-5 (full EP protection)</li> <li>Grade SAE 75W</li> <li>Mineral base oils</li> </ul>	⇒ Manual transmissions and differentials in moderate and severe service
Gearplus® 80W-90 GL-5 (formerly Multi-Purpose 4096)	<ul> <li>API GL-5 (full EP protection)</li> <li>Grade SAE 80W-90</li> <li>Mineral base oils</li> </ul>	<ul> <li>⇒ Differentials and manual transmissions in severe service</li> <li>⇒ Limited slip – top-off, refill, rebuilt</li> </ul>
Gearplus® 80W-140 GL-5	<ul> <li>API GL-5 (full EP protection)</li> <li>API MT-1</li> <li>Grade SAE 80W-140</li> <li>Mineral base oils</li> </ul>	<ul> <li>⇒ Differentials and manual transmissions in severe service</li> <li>⇒ Can be used in limited-slip axles where an SAE 80W-140 is allowed</li> </ul>
Pennzoil® Synthetic SAE 75W-90 GL-5 (formerly Gearplus® Super)	<ul> <li>API GL-5 (full EP protection)</li> <li>Grade SAE 75W-90</li> <li>Synthetic base oils</li> </ul>	<ul> <li>⇒ Manual transmissions and differentials in severe service</li> <li>⇒ Helps eliminate "cold shifting" problems sometimes experienced with SAE 80W-90 mineral oils</li> <li>⇒ Can be used in limited-slip axles where an SAE 75W-90 is allowed</li> </ul>

## GEAR OIL NOTES:

- \* API GL-5 GEAR OILS ARE NOT INTERCHANGEABLE WITH API GL-4 GEAR OILS.
- \* The extreme pressure (EP) additives in most gear oils contain sulfur-phosphorus compounds that can be corrosive to certain "yellow metal" components, if present at levels higher than recommended by the equipment manufacturer. "Yellow metals", such as copper and brass, are found in transmission synchronizers.
- \* GEARPLUS® SAE 80W-90 GL-5 (formerly known as Multi-Purpose 4096 Gear Lubricant), is the primary recommendation for the complete drain-and-refill of existing or rebuilt limited slip differentials in passenger cars, SUV's and light-duty trucks.
- \* Synchromesh Fluid is a unique transmission and transaxle product there are no other gear oils that can be substituted in applications calling for this fluid.
- \* Always follow your owner's manual for the correct lubrication recommendation.

To keep your Technical Manual current file in Section P: Product Applications. This bulletin supersedes Technical Information Bulletin P-21-B which should be removed and discarded.

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