# CHE Performance Products Suspension bushing materials guide

There are several bushing types and materials available. We have composed an article to aid you in selecting and identifying the right materials for your application. The most widely used bushing materials and their advantages and disadvantages are listed below.

**Rubber**: The factory bushings are rubber

# Advantages:

- -Quiet
- -Low cost

### Disadvantages:

- -Soft material that allows unwanted movement of the rear suspension
- -Deteriorates over time
- -Will overheat and melt in racing conditions

# **Polyurethane:** The most widely used aftermarket bushing material **Advantages**:

- -Firmer, more stable material than rubber
- -Will withstand high heat caused under racing conditions
- -Improved axle compliance
- -Improved road feel
- -Ride is not excessively harsh
- -Allows free axle movement without binding or damaging mounting points
- -Will not deteriorate or degrade over time

### Disadvantages:

- -Higher cost
- -Prone to "squeaking" if not lubricated regularly

**Nylon/Delrin:** Straight nylon bushings should only be used on properly modified vehicles

# Advantages:

- -Low cost
- -Hard, inflexible material that eliminates lateral or twisting movement
- -Does not "squeak" or need any lubrication

#### Disadvantages:

- -Limits rear axle articulation
- -Will cause damage to mounting points which are not properly reinforced if they are subject to twisting or lateral movements
- -Should only be used on dedicated race cars
- -Very harsh ride quality
- -Very high transfer of road noise

# **Spherical bearings:** Also known as rod ends or heim joints **Advantages:**

- -Allows free, unrestricted axle articulation
- -Eliminates unwanted axle movement
- -Usually designed to allow suspension adjustments

#### **Disadvantages:**

- -Very Harsh ride quality
- -Because they contain moving parts, they will wear out over time
- -Possibility of breakage
- -High cost
- -Require periodic cleaning and maintenance

#### **More Information**

For more information on bushing materials and selection, please check out our other articles in our support center.

