

HOW TO SELECT AXLES AND RUNNING GEAR

The following information is to help you make a selection of axles and running gear from our wide range of possible choices or call your branch and have one of our sales people assist you in choosing the right products.

1. How to Determine the Gross Vehicle Weight (GVW)

When building a trailer, the total Gross Vehicle Weight (GVW) must be determined in order to select the right axle or axles for the application. GVW includes the weight of the empty trailer and the weight of the intended cargo. (Example: 2,000 lb. empty trailer weight + 8,000 lbs. cargo = GVW of 10,000 lbs.)

2. How Many Axles

After determining the GVW; the number and capacity of the axles must be selected. For example, if you want 10,000 lb. GVW and want tandem axles, the minimum required capacity is 6,000 lb. per axle.

3. Brakes

First, determine if you want brakes on each axle. Most states require by law that at least one axle has brakes. Some states require that all axles have brakes. To determine how many brakes are necessary in a state, contact the local Department of Motor Vehicles. Second, determine what type of brake you prefer: Electric, Hydraulic Single-Serve, Hydraulic Free-Backing, Hydraulic Duo-Serve, Hydraulic Disc or Air "S" Cam Brakes

4. Which Type of Spindles Are Going To Be Required

Straight spindles are used mostly when the bed is over the tires or when low ground clearance is not required. Examples are flat beds, pull-type utility trailers, etc. Drop spindles are used when the lowest possible ground clearance is desired. Examples are Livestock and Horse Trailers, Car Haulers, Enclosed Cargo Van Trailers, etc.



5. What Are the Spring Centers

Spring Centers are the CL (centerline) measurement of the Spring Mounting Pads on the axle. Spring centers are usually matched to the approximate frame width of the trailer.

6. Which Bolt Pattern

The Bolt Pattern of the axles can vary depending on the capacity of the axle. The Bolt Pattern also determines what type tire and wheel can be used. If there is a specific tire and wheel you would like to use, please relay that information so we can help you to determine the proper bolt pattern and axle.

7. What is the Length of the Axle

The next step is to determine the length of the axle. Of the several ways and industry terms to describe this procedure, the most popular term is "Hub Face," which is the measurement from the base of the wheel stud to the base of the wheel stud on the opposite end of the axle. Another term frequently used is "Track". Track is the center of the tire to the center of the opposite tire. This measurement varies depending on what type of wheel is used, because each type of wheel (White Spoke, OEM, Custom) could have a different offset, changing the tire center.

8. Which Type of Springs

There are two basic types of springs to choose from: Double Eye or Slipper Springs. Double Eye Springs are used with the shackle-type suspensions. Slipper Springs are the heavy-duty springs used with slipper-type suspensions. Complete sets of springs and u-bolt kits can be ordered with axles.

9. Which Hanger Kit

There are several Hanger Kits to choose from - single, tandem or triple for both double eye and slipper springs. Hanger Kits consist of Spring Hangers that attach to the frame, Equalizers (tandem or triple Hanger Kits), Shackle Straps (if double eye springs) and all the necessary hardware.

