Seven steps to successful caster replacement!

When replacing existing casters you have a unique opportunity to improve the safety, performance and ergonomics of your mobile equipment. Following are important specifications and factors to keep in mind when replacing casters.

Step 1. Determine types and amount of casters needing to be replaced.
There are a variety of casters that are on mobile equipment. Some carts have two swivel casters and two rigid casters. Some carts have two casters with brakes and two free swivel models.

Step 2. Check the equipment environment?
Before finding replacement specifications on the casters it is highly recommended you look carefully at the environment your mobile equipment was used.

Was your equipment hard to roll? If yes, it may be better to specify a larger wheel diameter, or a harder tread wheel, or a higher quality wheel bearing.

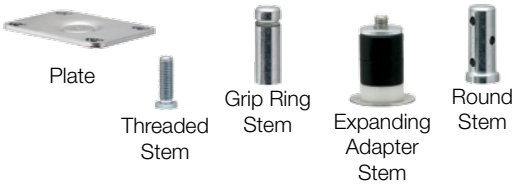
Did your mobile equipment have plenty of clearance? If no, you may want to specify lower load height casters. Was your equipment too low and stressed your back? If yes, you may want to specify a caster with a larger diameter wheel to increase load height.

Was there excessive carpet wear, or floor scuffs? If yes, it may be better to specify a softer tread wheel or wheels that do not mark floors.

Does the caster look rusty because it was not designed to be used in a harsh environment or an environment that required frequent cleaning? If yes, you may want to specify a plastic or stainless steel caster with sealed bearings.

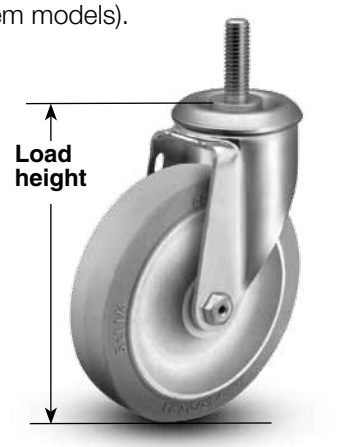
Did the mobile cart roll over wires or room entrance thresholds? If yes, donut or crowned wheel treads roll over obstructions better than flat tread wheels.

Step 3. Determine mounting type of each caster on equipment.



When replacing casters with stems it is important to get accurate length and widths of the stems. In the case of threaded stems it is equally important to know the thread type (course or fine spec) and whether the replacement stem will screw properly into existing equipment. When replacing plate casters it is important to know the plate dimensions and bolt hole spacing so the caster will easily mount to existing equipment.

Step 4. Determine load height
If you want your equipment to be a certain height, or if you are replacing only some casters on the mobile equipment, load height needs to be very accurate. Load height is measured from bottom of wheel to top fastening (not including the stem on stem models).



Step 5. Determine swivel radius
If you are replacing a swivel caster, measure the distance from the center of the fastening to outer most part of the caster (usually the wheel tread, but if you have a brake the distance may be even greater). The swivel radius spec is important because there may be obstructions under the mobile equipment that may prevent the caster from rotating.

Step 6. Determine wheel dimensions.
Two critial wheel dimensions are the diameter and the tread width. Wheel diameter is the vertical measurement from the top to the bottom of the wheel. Tread width is the width of the caster wheel.

Step 7. Determine caster load specs.
Caster load is a critical specification. It is important that casters can safely support the weight of the cart that is fully loaded. With all of the specs above such as wheel diameter and tread width, etc. you can easily determine load specs for each caster simply by referring to the caster catalog. Caster load is determined by dividing the number of casters by the weight of the mobile cart fully loaded. If a cart uses four casters and weighs 400 lbs when fully loaded, the caster capacity for each caster needs to be up to 100 lbs each.

Authorized Dealer:

©2014 Colson Group Canada, Inc