

Caster Wheel Kit Rev B (#28961)

Features

- Dual 3-inch (76 mm) sealed pneumatic rubber tires
- Precision machined 6061 aluminum parts
- High quality ball bearings for low-friction swivel action
- Quick and easy assembly
- Dramatically improves the performance and aesthetic appeal of mid-size robots
- Well-suited for use with the Motor Mount and Wheel Kit-AL #28962, or Motor Mount and Wheel Kit-MP (#28963)
- Designed to mount to the Arlo Robot Base Kit (#28960)



This kit contains a single, precision machined caster assembly (two are required if you're mounting them to our Arlo Robot Base Kit - #28960). High quality 6061 machined aluminum components are combined with smooth-rolling ball bearings and durable 3-inch pneumatic rubber tires. The dual independent tire design reduces vibration and drag, as well as increases load-carrying capacity.

This Caster Wheel Kit is designed to be completely maintenance-free, and should deliver long life and consistently high performance. The durable, sealed pneumatic tires are low-bounce and provide a smooth ride, even on rough surfaces.

This Caster Wheel Kit is designed to work well with our Motor Mount and Wheel Kit -AL (precision machined 6061 machined aluminum, #28962) as well as our injection molded plastic version - the Motor Mount and Wheel Kit -MP (molded HDPE plastic #28963) which both include two 36-Position Quadrature Encoder sets (#29321).

The top surface of the Caster Wheel Kit's mounting plate and the top surfaces of the motor bearing blocks in both of the Motor Mount and Wheel Kits are all designed to be at the same elevation. This simplifies chassis design; use our Arlo Robot Base Kit (#28960) or create your own.

Note: This kit is slightly different from the original Caster Wheel Kit (#27961); see the Product Compatibility Notice on page 4 for details.

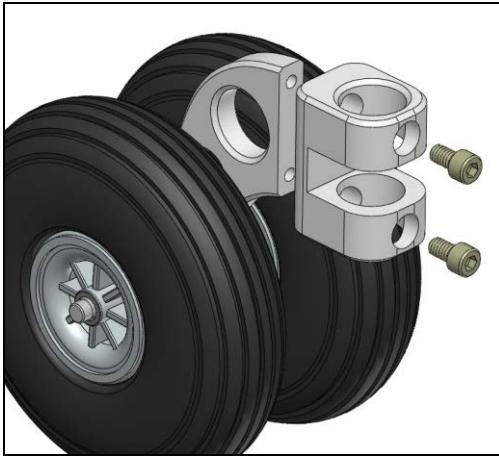
Bill of Materials

Please check your kit's contents before beginning. If any parts are missing, contact the Parallax sales department for assistance (contact information is show above).

Stock Code	Description	Quantity
730-00010	Arm Assembly	1
730-00020	Swivel Block	1
730-00015	Swivel Rod	1
730-00025	Base Plate	1
700-00086	Socket Cap Screw, #6-32 x 1/4 inch length	2
700-00085	Set Screw, slotted #6-32 x 1/8 inch	1
724-00002	Flange Bearing, 0.25 inch ID, 0.5 inch OD	2
726-00002	Shaft Collar, 0.25 inch ID	1
710-00032	Screw, #6 x 3/8", Cap ,SS	3

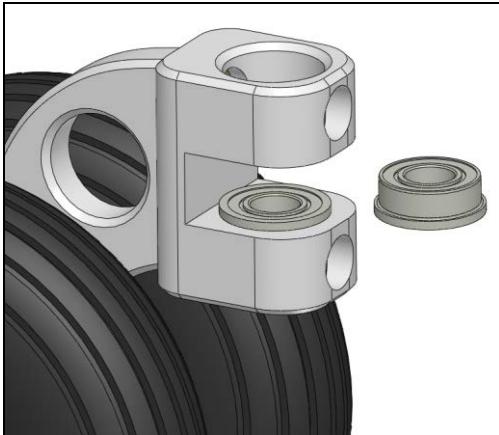
Tools and Materials Required (Not Included)

- 7/64 inch hex key
- 3/32 inch hex key
- Small flat-head screwdriver
- Hammer (optional)
- Thread-locking compound (optional)
- Assembly Instructions



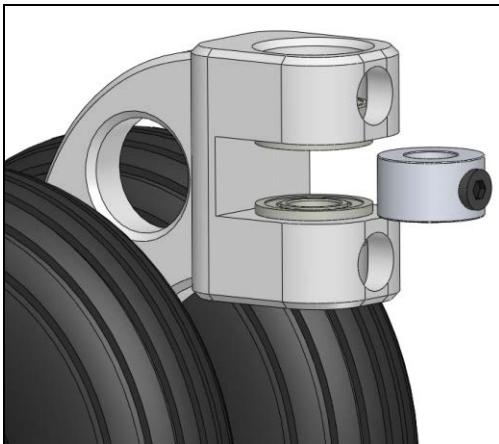
Step 1

Connect the caster wheel arm assembly to the swivel block using a 7/64 inch hex key and two #6-32 x 1/4 inch socket cap screws.



Step 2

Insert both bearings as shown facing outward from the center of the swivel block.



Step 3

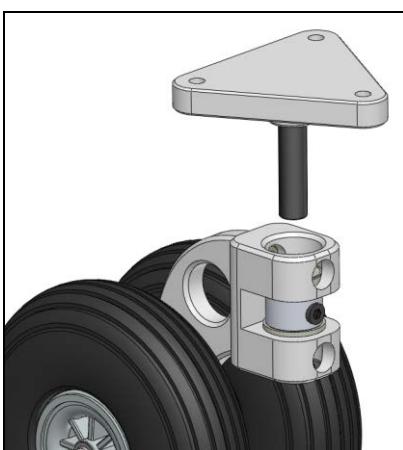
Position the shaft collar between both flange bearings in the swivel block.



Step 4

Insert the swivel rod into the mounting plate. The machined flat on the rod should face the set screw. Make sure the rod is pressed as far into the plate as possible. This step may require a hammer to lightly tap the rod into the slot.

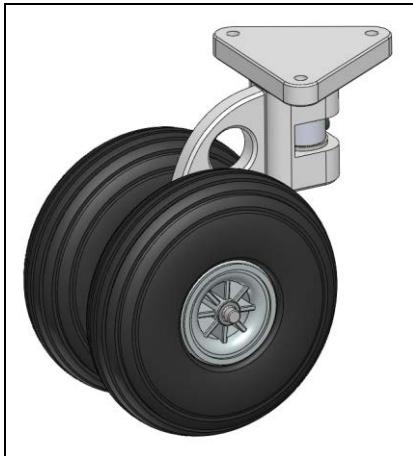
Secure the rod in place using the slotted #6-32 set screw. For improved results, apply a small drop of thread locking compound to the set screw before tightening it into position.



Step 5

Insert the swivel rod through the center of the bearings and shaft collar. There should be about a 0.1 inch (2.5 mm) gap between the bottom surface of the mounting plate and the top surface of the swivel block.

Using the 3/32 inch hex key, securely tighten the shaft collar set screw to lock the height of the mounting plate. The overall height of the caster wheel assembly can be adjusted if necessary by modifying how far the swivel rod is inserted through the shaft collar.



Assembly Complete!

The caster wheel kit is completely assembled and ready to be installed using three #6 socket cap screws (not included).

For additional product information, check out the Caster Wheel Kit Rev. B (#28961) product page at www.parallax.com.

Product Compatibility Notice

This Caster Wheel Kit Rev B is designed to be compatible with these products:

- Arlo Base Kit (#28960)
- Motor Mount and Wheel Kit -AL (#28962)
- Motor Mount and Wheel Kit -MP (#28963)

The difference between the original Caster Wheel Kit (#28971) and the Caster Wheel Kit Rev B (#28961) is that Rev B is about 1/8" taller in mounting height. The original Caster Wheel Kit accommodated the different mounting styles of the previous Motor Mount and Wheel Kit (#27971).

Mouser Electronics

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