

Web Site: www.parallax.com Forums: forums.parallax.com Sales: sales@parallax.com Technical: support@parallax.com Office: (916) 624-8333 Fax: (916) 624-8003 Sales: (888) 512-1024 Tech Support: (888) 997-8267

## Caster Wheel Kit (#28971)

#### **Features**

- Dual 3-inch (76 mm) sealed pneumatic rubber tires made by Du-Bro
- Precision machined 6061 aluminum parts made in-house at Parallax headquarters in California, USA
- High quality ball bearings for "friction free" 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 with Position Controller (#27971)



Congratulations on purchasing the Caster Wheel Kit! You will find that the components contained in this kit offer the utmost in quality and performance. The kit features precision machined 6061 aluminum parts combined with high quality ball bearings and durable 3-inch Du-Bro pneumatic rubber tires. The dual independent tire design reduces vibration and drag, while also increasing its load-carrying capacity.

This caster wheel kit uses precision shielded ball bearings, making the kit completely maintenance-free for long life and consistently high performance. The durable sealed pneumatic tires are low-bounce and provide a smooth ride, even on rough surfaces.

The Caster Wheel Kit is designed to work well with our Motor Mount and Wheel Kit with Position Controller (#27971). The top surface of the Caster Wheel's mounting plate and the top surface of the motor bearing blocks in the Motor Mount and Wheel Kit are both at the same height, which simplifies the chassis design.

#### **Parts List**

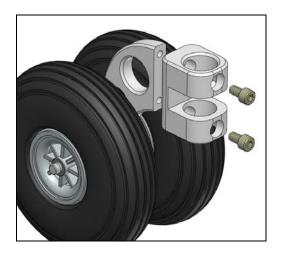
Please check your kit's contents before beginning. If any parts are missing, contact the Parallax sales department for assistance (contact information is show above).

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

## **Tools and Materials Required (Not Included)**

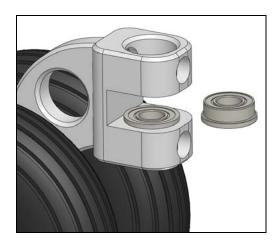
- 7/64 inch hex key
- 3/32 inch hex key
- Small flat-head screwdriver
- Hammer (optional)
- Thread-locking compound (optional)
- Three #6 socket cap screws for mounting the Caster Wheel Assembly

## **Assembly Instructions**



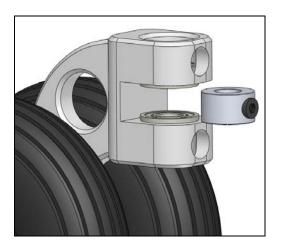
## Step 1:

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.



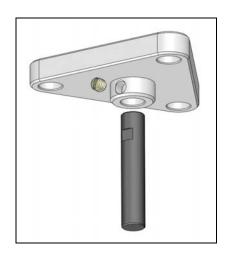
## Step 2:

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!

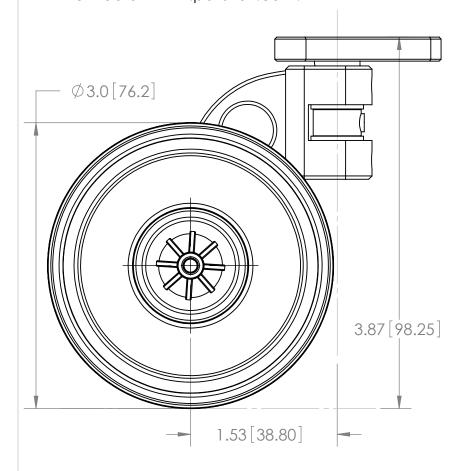
The caster wheel kit is completely assembled and ready to be installed using three #6 socket cap screws (not included).

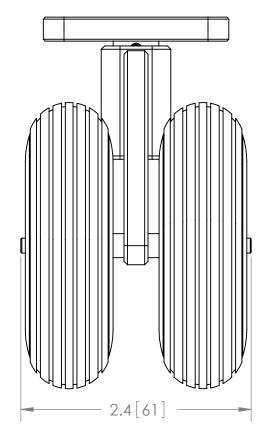
For additional product information, check out the Caster Wheel Kit (#28971) product page at www.parallax.com.

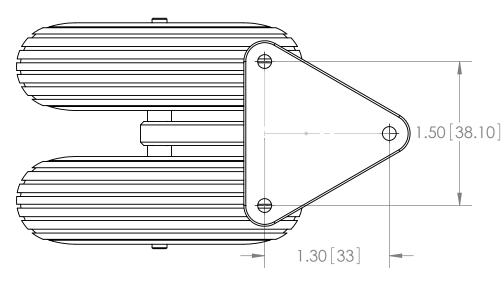
#### Material: ---

#### **NOTES**

1. Dimensions are given as reference. For additional dimensional information see the eDrawing model available for download on the web at www.parallax.com.









#### PROPRIETARY INFORMATION

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#### **UNLESS OTHERWISE SPECIFIED**

DIMENSIONS ARE IN INCHES (mm) LENGTH TOLERANCES: X.XX ± 0.005 IN X.XXX ± 0.001 IN ANGLE TOLERANCES: X ± 2° X.X ± 0.5°

# PARALLAX X™

 DATE 20081006

Part # 28971

REV A

Parent Part # ---

IIILE

## Caster Wheel Kit

SCALE: 1:1 DRAWN BY K. McCullough

SHEET 1 OF 1



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

#### Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов:
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001:
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина,

дом 2, корпус 4, литера А.