

# DIYnamics LEGO Table

## Parts List

The parts used to build the DIYnamics Technics Table can be purchased online. This document lists necessary components and where to order them. Prices and links reflect time of writing (September 1<sup>st</sup>, 2020). The Estimated Times of Arrival (ETA) below reflect time to ship to Los Angeles, California.

### Required Components

The DIYnamics Technics Table is a modular system. **Required Components** are used to build the base setup; LEGO powered rotating platform with tank. **Optional Components** enable community developed add-ons that expand the functionality of the DIYnamics Technics Table.

### OXO Lazy Susan

The OXO Lazy Susan provides a stable rotating platform. Its 16 inch diameter provides the flexibility to mount tanks of multiple sizes.



Purchase 1 OXO Lazy Susan for \$17.99 from <http://a.co/16P3tM1> (ETA <1 week)  
If not available, search for “OXO Good Grips 16” Turntable” from other vendors.



### LEGO Components

The LEGO Components are used to build the LEGO Assembly that supports a battery powered drive wheel rotating the OXO Lazy Susan. Power Functions parts consist of motors and battery boxes. Pick-a-Brick parts consist of individual bricks.

If you are upgrading from the DIYnamics LEGO to Technics Table, please see the Upgrade Parts List for the LEGO Components to buy instead.

Picture	Part Name	Link and ETA	Quantity
	LEGO® Power Functions XL-Motor	<a href="https://tinyurl.com/legoxlmotor">https://tinyurl.com/legoxlmotor</a> (ETA 1 week) or <a href="https://www.amazon.com/LEGO-Functions-Power-XL-Motor-8882/dp/B003S832A6">https://www.amazon.com/LEGO-Functions-Power-XL-Motor-8882/dp/B003S832A6</a> (ETA 1 week)	1 (\$9.99 each) **
	LEGO® Power Functions Battery Box *	<a href="https://tinyurl.com/legobattery">https://tinyurl.com/legobattery</a> (ETA 1 week) or <a href="https://www.amazon.com/LEGO-Functions-Power-Battery-8881/dp/B003TZSUZA">https://www.amazon.com/LEGO-Functions-Power-Battery-8881/dp/B003TZSUZA</a> (ETA 1 week)	1 (\$6.99 each) **
Subtotal Cost			\$16.98

\* Requires 6 AA batteries

\*\* Reflects MSRP for Power Functions parts. As the product line is phased out, the components are becoming more expensive and may cost more than MSRP.

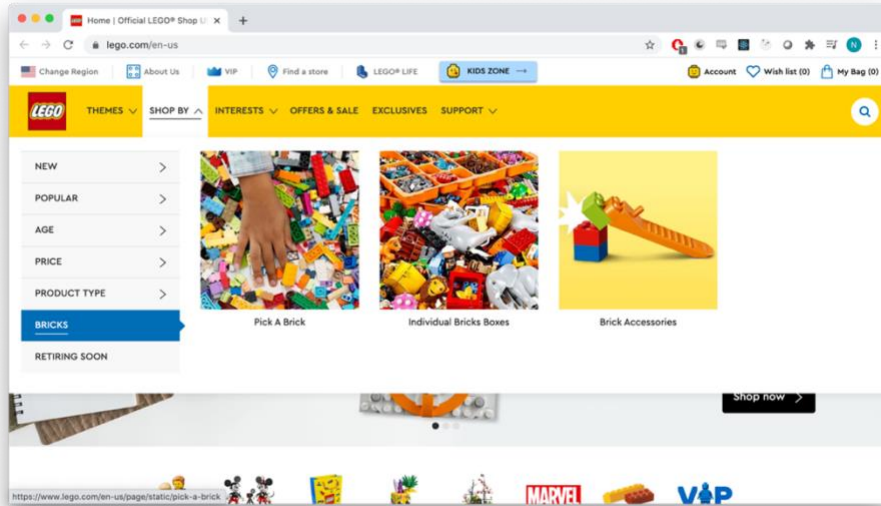
## Note that LEGO is discontinuing the Power Functions product line per reports.

As a result, the XL-Motor and AAA Battery Box are no longer available for purchase from the LEGO website and feature a markup at other retailers. An option is to replace LEGO parts is to purchase off-brand but compatible parts. AliExpress features multiple vendors such as <https://www.aliexpress.com/item/4000332971058.html> - choose equivalent motors and battery boxes based on picture. Note that we have experience using AliExpress parts successfully but cannot guarantee that they will match the performance of LEGO parts. Feel free to reach out to us via email at [dynamicsteam@gmail.com](mailto:dynamicsteam@gmail.com) or Twitter at <https://twitter.com/diynamicsteam> regarding your experiences with non-LEGO parts.

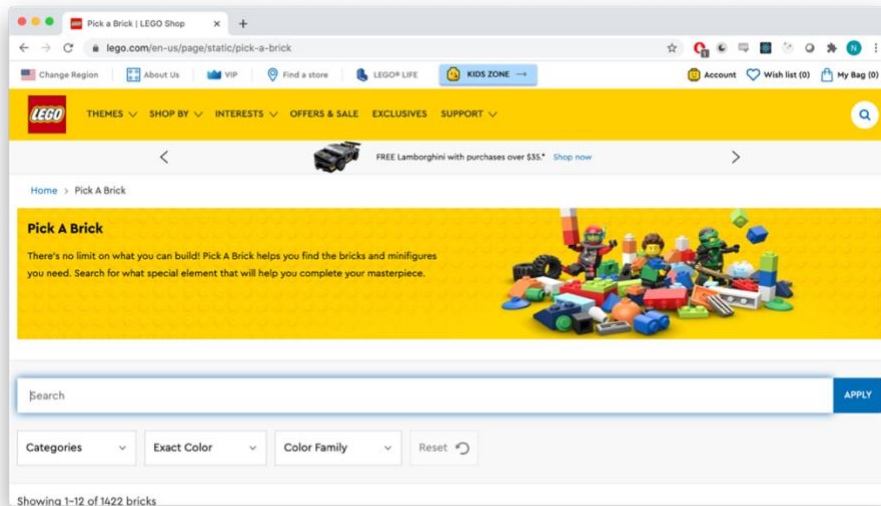
## Note that Pick-a-Brick parts have an ETA of approximately 4-6 weeks.

To purchase individual bricks from Pick-a-Brick:

- Go to the Pick-a-Brick section of the <https://lego.com/> website



- Scroll down to the 'Search' box and input the following Design ID codes



- Select parts and their quantity using the 'Pick' box






Picture	Part Name	Design ID	Quantity
	Brick 2x4	3001	6 (\$0.21 each)
	Plate 2x4	3020	3 (\$0.14 each)

	Plate 4x4	3031	2 (\$0.21 each)
	Plate 6x10	3033	1 (\$0.86 each)
	Technic Brick 1x10	2730	1 (\$0.43 each)
	Technic Brick 1x6	3894	1 (\$0.30 each)
	Angle Plate 1x2 / 2x2	21712	4 (\$0.12 each)
	Cross Axle 5M	32073	1 (\$0.13 each)
	1/2 Bush	32123	2 (\$0.06 each)

	Connector Peg with Friction	2780	4 (\$0.06 each)
	Rim Wide 18/14 with Cross	55982	1 (\$0.22 each)
	Tyre Normal Wide 4x14	92402	1 (\$0.71 each)
Subtotal Cost			\$5.59

## Tank

The Tank sits atop the OXO Lazy Susan and holds water serving as the medium for fluid flows. The following option is our recommended choice \*\*\* and different tanks have been used to success.

If searching for a different tank option, we recommend considering the following criteria:

- Cylindrical shape
- Flat bottom
- Large diameter and height
- Clear walls

Purchase 1 Royal Imports Flower Acrylic Vase 8" diameter x 4" height for \$10.99

<https://www.amazon.com/dp/B07TBHBVS1>

(ETA <1 week)



\*\*\* We previously recommended a smaller version of the tank from the same manufacturer. If upgrading from the DIYnamics LEGO to Technics Table, we recommend purchasing the larger version of the tank.

## Food Coloring

The Food Coloring is used to visualize fluid flows in the Tank.

Purchase 1 pack of assorted food coloring for \$3.99

<https://www.amazon.com/dp/B00GNHIBZU>

(ETA <1 week)





**Required components total cost: \$55.54**

# Optional Components

## LEGO Power Functions IR Components

The LEGO Power Functions IR Components provide the ability to change speed of rotation. As of 2020, note that we recommend using the methods detailed in the External Power Supply Guide instead for finer control over speed of rotation.

Picture	Part Name	Link and ETA	Quantity
	LEGO® Power Functions IR Speed Remote Control	<a href="https://tinyurl.com/legoremote">https://tinyurl.com/legoremote</a> (ETA 1 week)	1 (\$12.99 each)
	LEGO® Power Functions IR Receiver	<a href="https://tinyurl.com/legoreceiver">https://tinyurl.com/legoreceiver</a> (ETA 1 week)	1 (\$14.99 each)
Total Cost			\$27.98