



REV BUILDING SYSTEM

LINEAR MOTION - 1" EXTRUSION

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1 LINEAR MOTION OVERVIEW

Linear motion is made easy with the REV Building System. The chamfered slot along the extrusion is designed to fit standard V-Groove Bearings (REV-29-1014) that are part of a carriage assembly built with the simple but versatile Dual Bearing Plate (REV-21-1032).

The bearing plate can be assembled into two main configurations: one using v-groove bearings with the REV 1" Extrusion (REV-21-1000) and one using round bearings with 1" x 2" rectangular tubing.

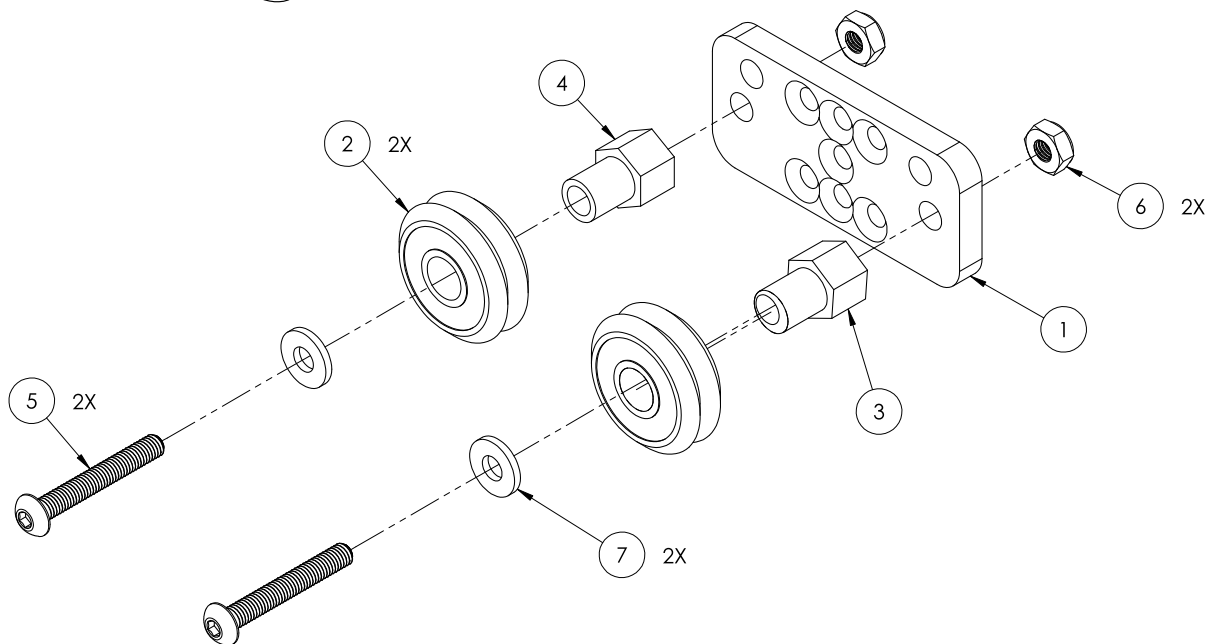
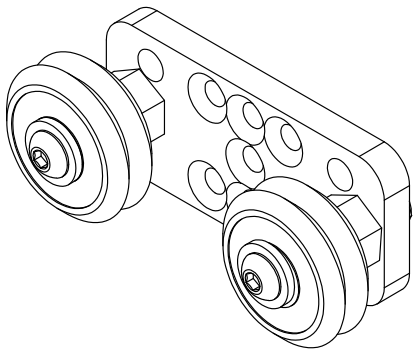
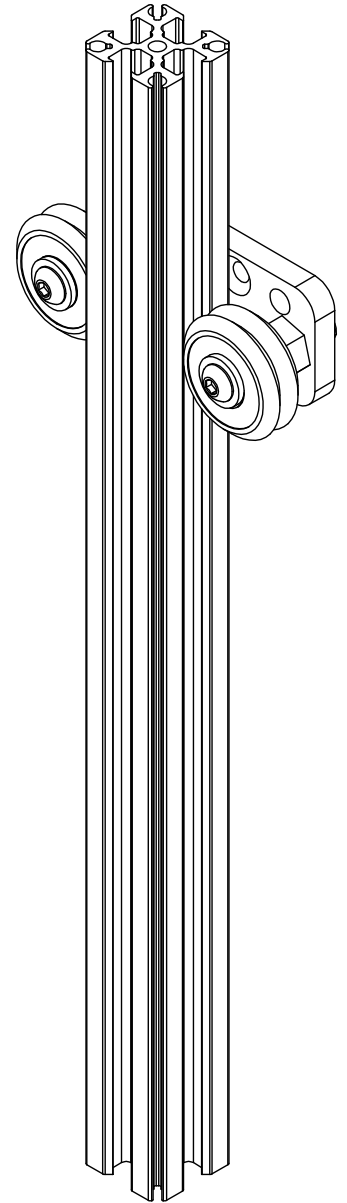
Bearing pressure is easily adjustable using a wrench and the REV Eccentric Bushing (REV-21-1029). See Section 4 BEARING for more information.

2V-GROOVE CARRIAGE

The V-Groove Carriage Assembly is designed to interface with the REV Building System 1" Extrusion. With the flexibility of five countersunk mounting holes on the Dual Bearing Plate (REV-21-1032), the carriage can be used to create versatile and compact linear systems. Table 2-1 lists all the parts required to assemble the carriage.

Table 2-1 V-Groove Carriage Assembly BOM

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	REV-21-1032	Dual Bearing Plate	1
2	REV-29-1014	V-Groove Bearing	2
3	REV-21-1029	Eccentric Bushing	1
4	REV-21-1030	Concentric Bushing	1
5	Generic	Button-Head Socket Cap Screw 1/4-20 x 1-1/4"	2
6	am-1213	Nylock Hex Nut 1/4-20	2
7	am-1069	1/4" Washer 0.63" OD	2

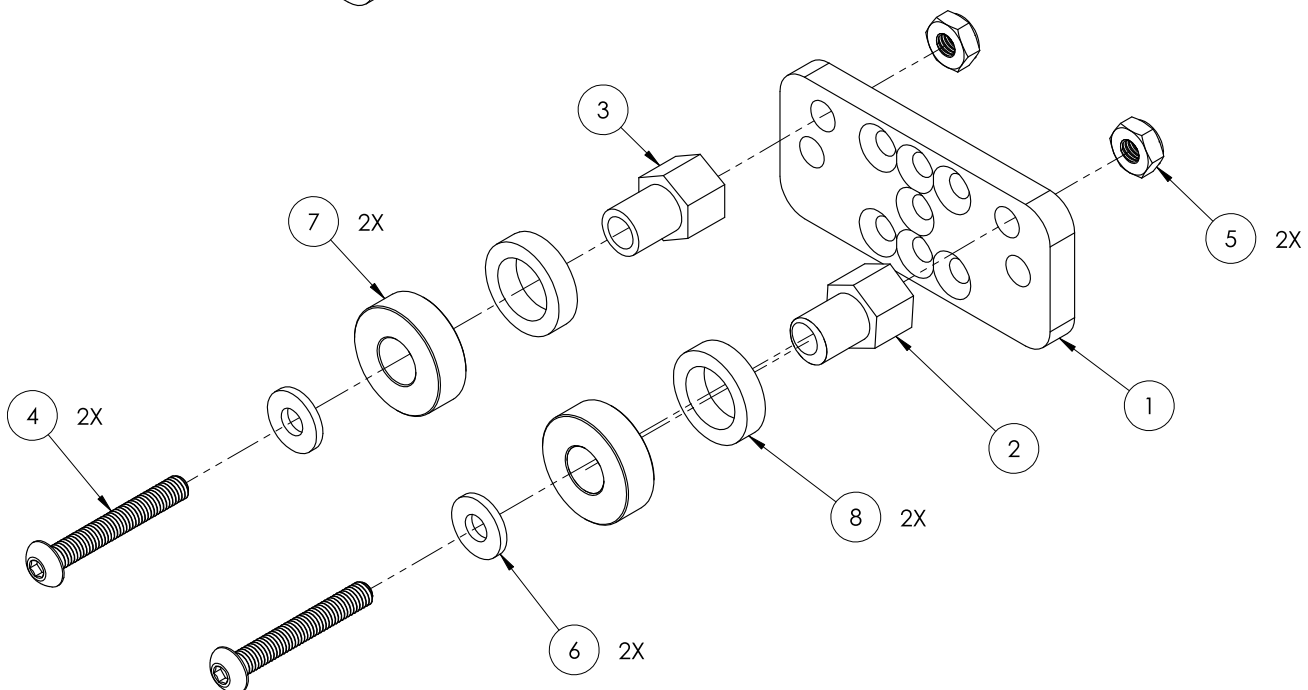
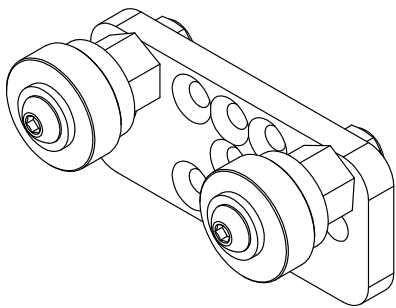
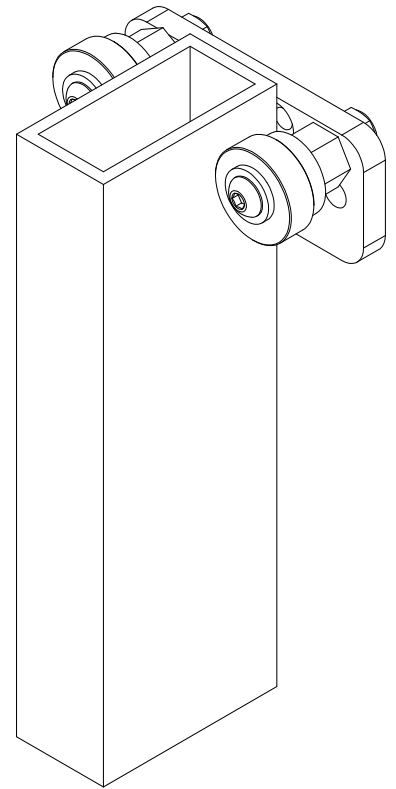


3 ROUND CARRIAGE

The Round Carriage Assembly is designed to interface with standard 1" wide tubing (1" x 2" tubing shown here). With the flexibility of five countersunk mounting holes on the Dual Bearing Plate (REV-21-1032), the carriage can be used to create versatile and compact linear systems. Table 3-1 lists all the parts required to assemble the carriage.

Table 3-1 Round Carriage Assembly BOM

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	REV-21-1032	Dual Bearing Plate	1
2	REV-21-1029	Eccentric Bushing	1
3	REV-21-1030	Concentric Bushing	1
4	Generic	Button-Head Socket Cap Screw 1/4-20 x 1-1/4"	2
5	am-1213	Nylock Hex Nut 1/4-20	2
6	am-1069	1/4" Washer 0.63" OD	2
7	am-0516	Shielded Bearing 3/8" ID 7/8" OD	2
8	am-1181	3/16 Thick Nylon Spacer	2



4 BEARING PRESSURE

Regardless of the carriage configuration being used, the bearing pressure can be adjusted with the REV Eccentric Bushing (REV-21-1029). To adjust bearing pressure:

1. Slightly loosen the screw that runs through the eccentric bushing.
2. Using a 1/2" wrench, turn the bushing so that the desired pressure is achieved.
3. Hold the bushing in the desired position as the screw is tightened again.

