



Table of Contents

What is the Swerve X (Corner Mount)?	3
Corner Block Assembly	4
Corner Block Installation	5
Bottom Mount Frame Assembly	6
Bottom Mount Swerve Module Installation	7
Top Mount Frame Assembly	8
Top Mount Swerve Module Installation	9
Revision Table	10



What is the Swerve X (Corner Mount)?

One of the four possible configurations of WCP's Swerve X, the Corner Mount is the new mounting style used in the Swerve X. This mounting style allows for much more space inside the drivetrain for other mechanisms when compared to the other Swerve X configurations.

Notable features:

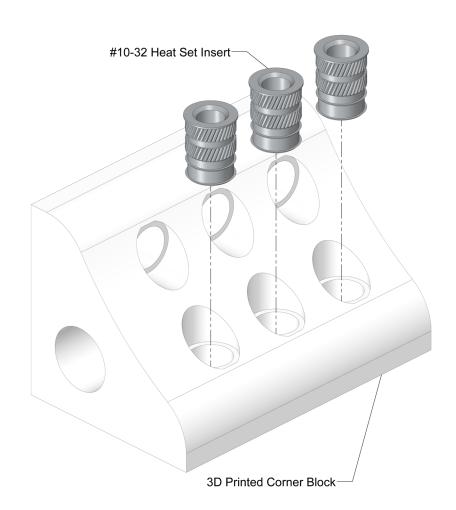
- Takes up the least amount of space inside the frame when compared to the other Swerve X configurations.
- Leaves more room for mechanisms.
- · Has the option for low center of gravity or high ground clearance.



Corner Block Assembly

Install the heat set inserts into the corner block. Make sure that the inserts are straight.

Repeat this step for all six holes in the corner block.

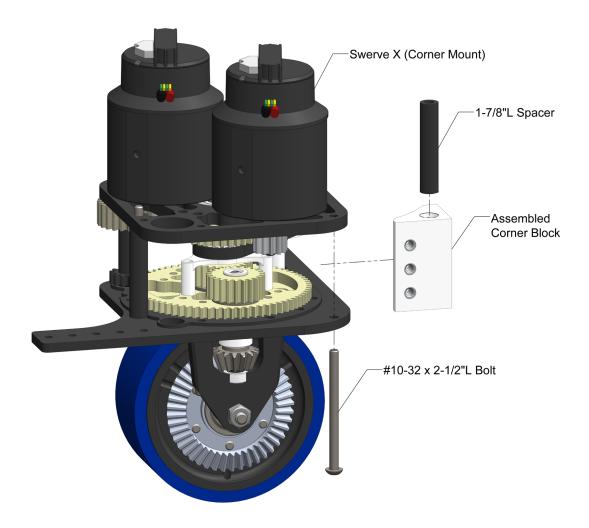




Corner Block Installation

In order to install the Corner Block, the three bolts holding the top and bottom Swerve X Plates together must be loosened. The bolt and spacer in the corner shown in the image below must be removed entirely. Slide the spacer into the Corner Block, then place the Corner Block + Spacer back into the swerve. Retighten all bolts.

Note: If you are using the Top Mounting style, then this step can be skipped.

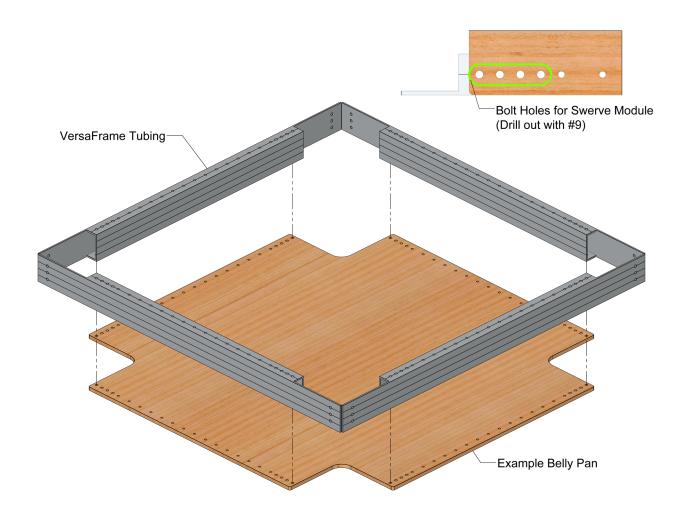




Bottom Mount Frame Assembly

The belly pan must be installed on the opposite side of the tube from the swerve module. Unless the holes are used for mounting the swerve, the belly pan can be installed using either bolts or rivets as desired.

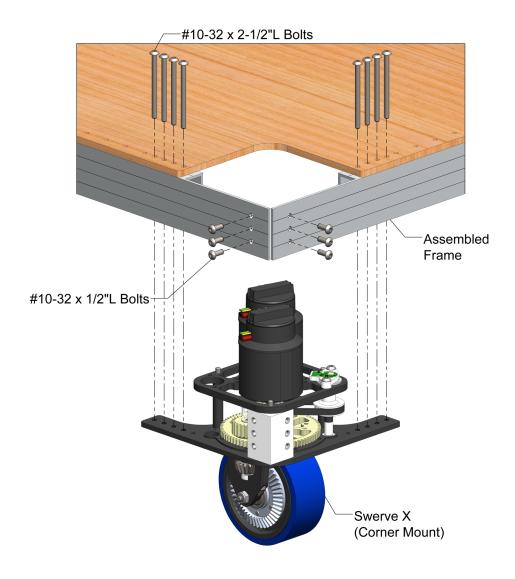
Note: If you are using a wood belly pan like in the example, the frame can be assembled with an aluminum gusset mounted on the same side as the belly pan. This will strengthen the frame. See WCP-EX-0004 for example gussets.





Bottom Mount Swerve Module Installation

The module must be installed from the bottom of the frame. Thread in six $#10-32 \times 1/2$ "L bolts from the outside into the Corner Block.

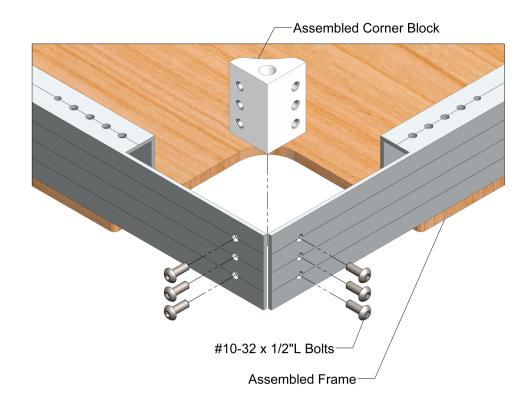




Top Mount Frame Assembly

For this mounting style, the corner block will be used for the frame assembly. Instead of being installed in the Swerve Module, it will be installed directly into the frame.

Note: The belly pan still must be installed on the opposite side of the tube from the Swerve Module, regardless of mounting style.



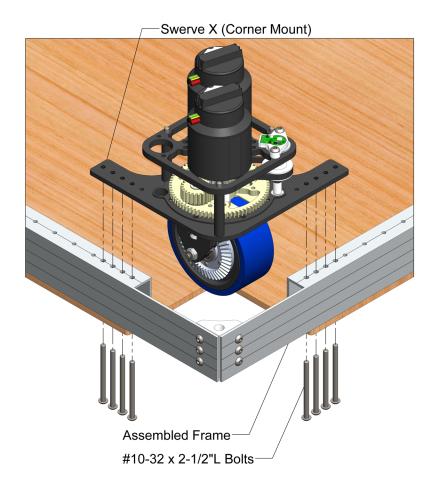


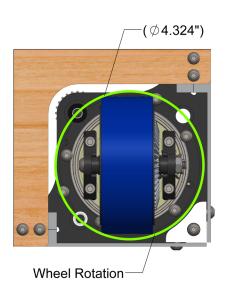
Top Mount Swerve Module Installation

The Swerve Module will be installed from the top of the frame for this configuration. If you are assembling your drivetrain with gussets on the corners, be sure that it clears the radius of the wheel. In the images below, the belly pan used for this guide clear the wheel by a minimum of 1/4".

Note: The radius for the wheels rotation is the same across all configurations of the Swerve X.

Note: If you design the belly pan to be too close to the module, this may cause issues with removing the wheel.







Revision Table

Revision Date	Revision #	Description
11/19/2021	1.0	First revision created.