

# ARMABOT

# Differential Swerve Drive

P/N A0067

Installation

Instructions

All screws with out a locking element need loctite.

Add wave washers under screws if spacing is too tight for bevel gears.

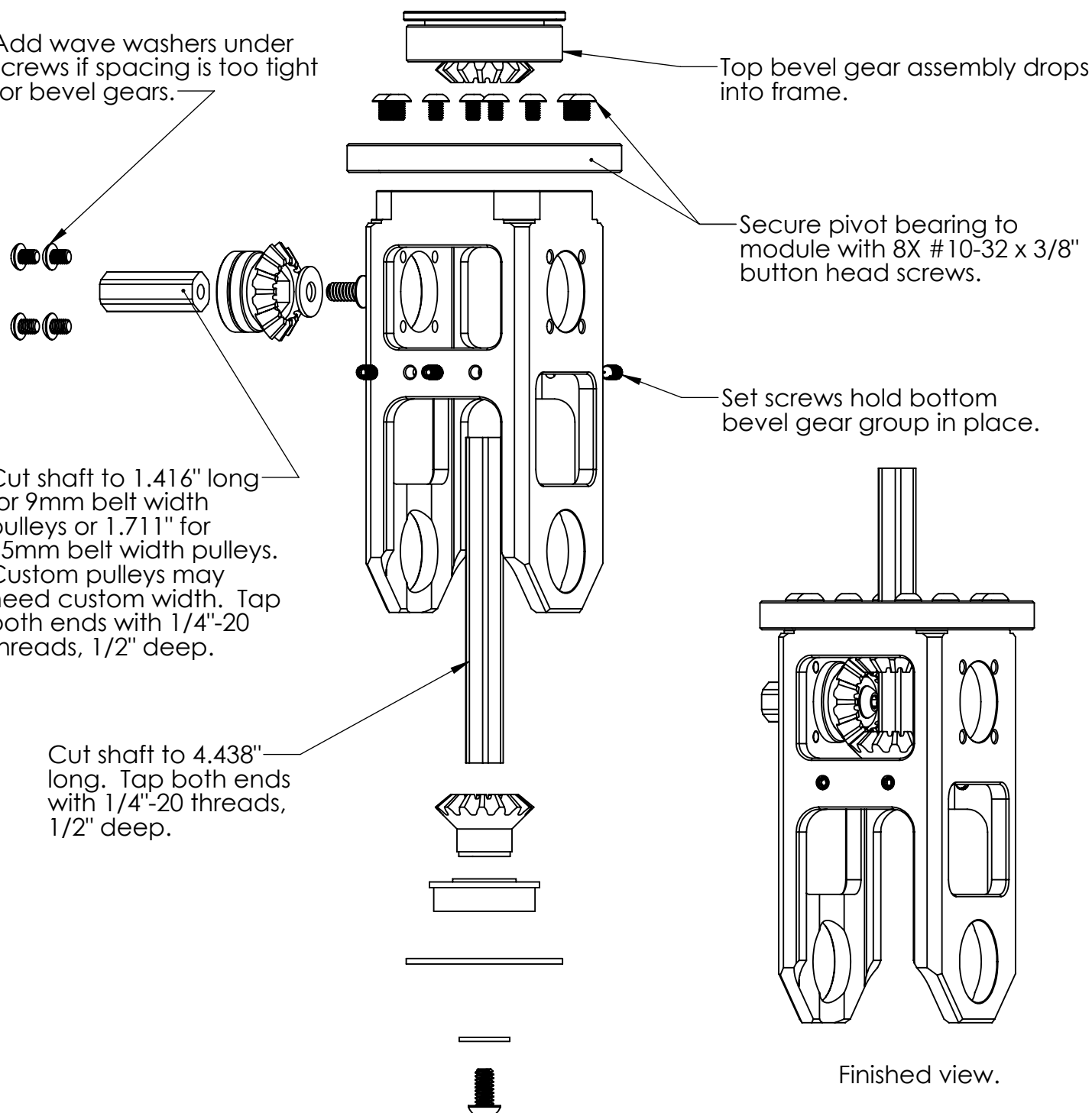
Top bevel gear assembly drops into frame.

Secure pivot bearing to module with 8X #10-32 x 3/8" button head screws.

Set screws hold bottom bevel gear group in place.

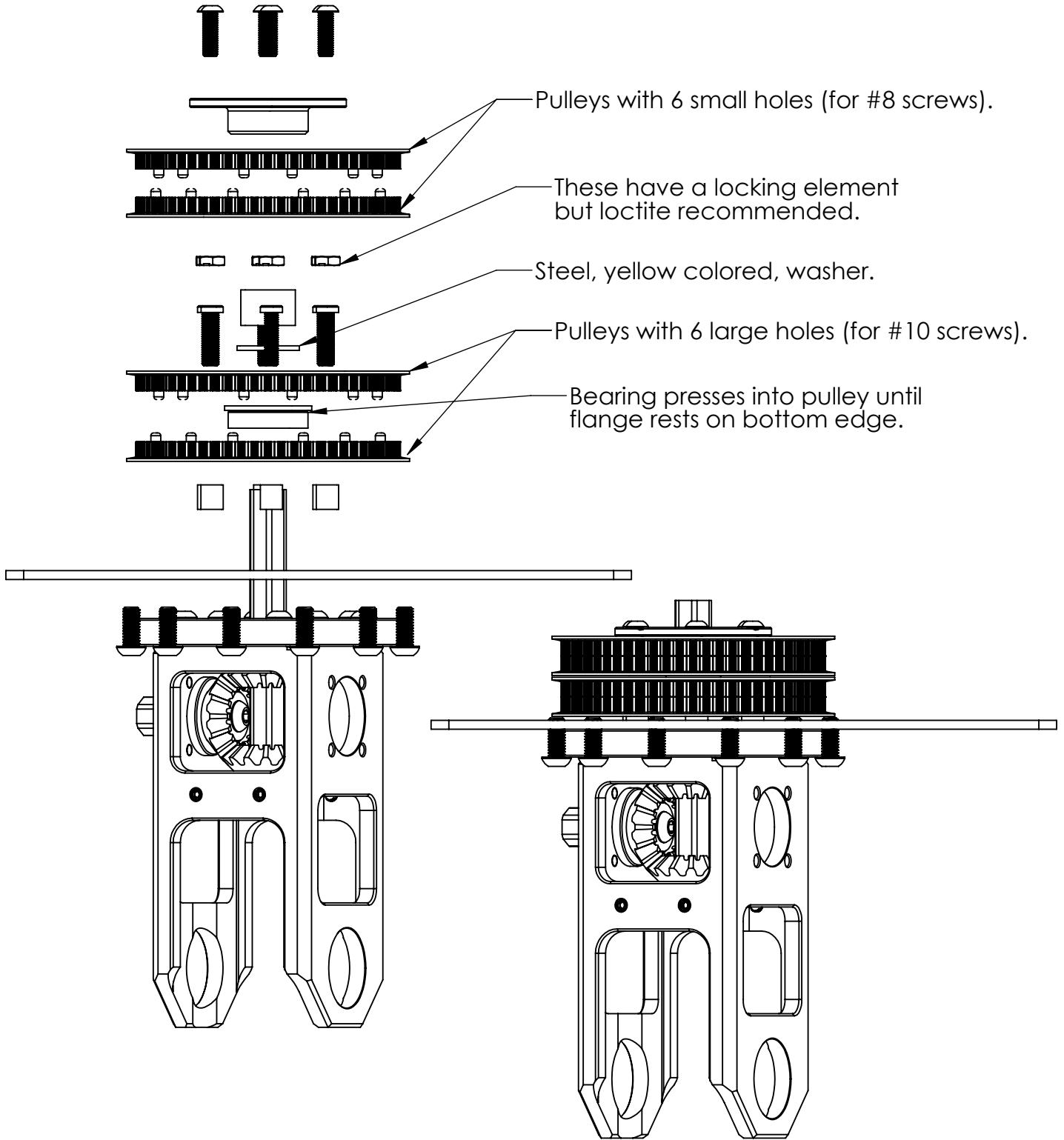
Cut shaft to 1.416" long for 9mm belt width pulleys or 1.711" for 15mm belt width pulleys. Custom pulleys may need custom width. Tap both ends with 1/4"-20 threads, 1/2" deep.

Cut shaft to 4.438" long. Tap both ends with 1/4"-20 threads, 1/2" deep.



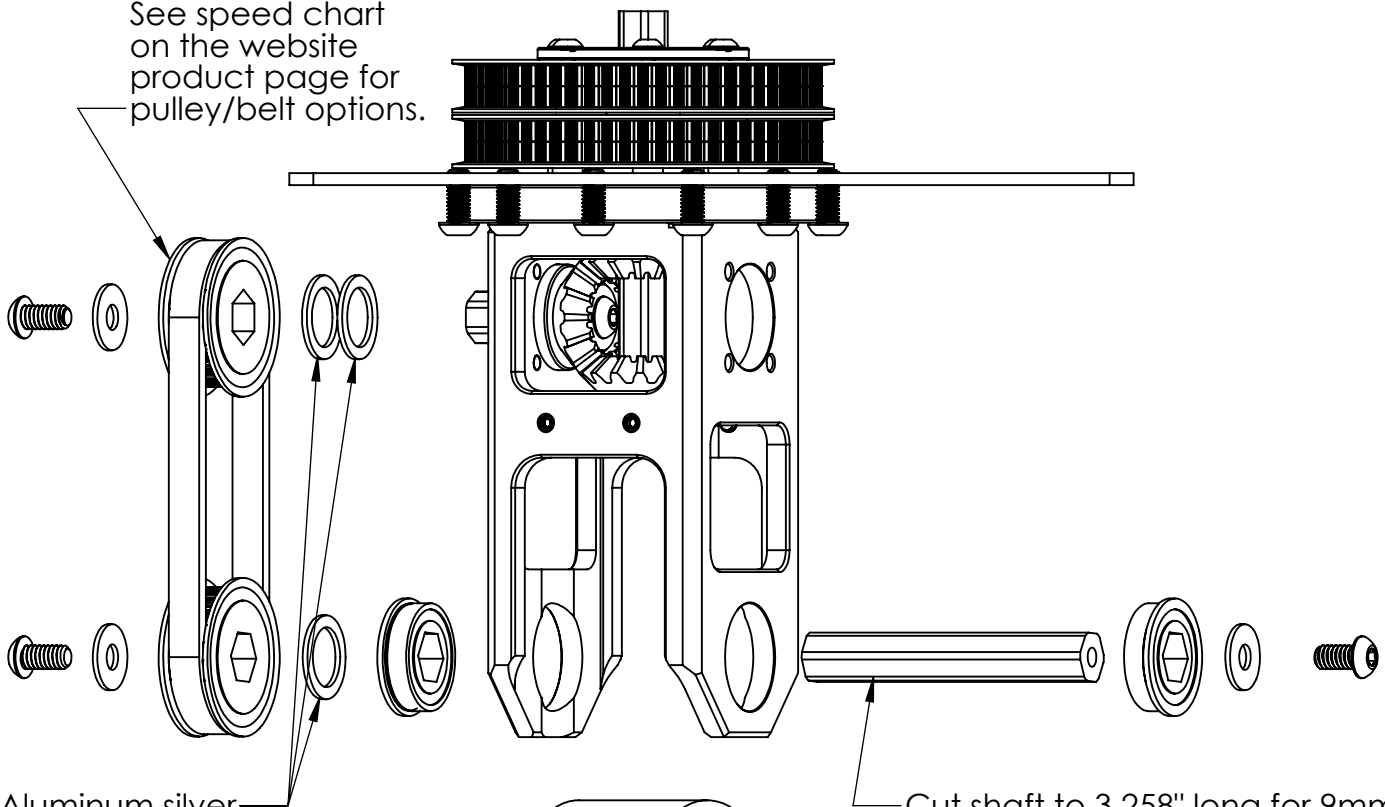
Finished view.

All screws with out a locking element need loctite.



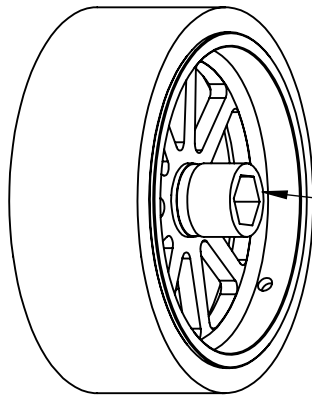
Finished view.

See speed chart on the website product page for pulley/belt options.



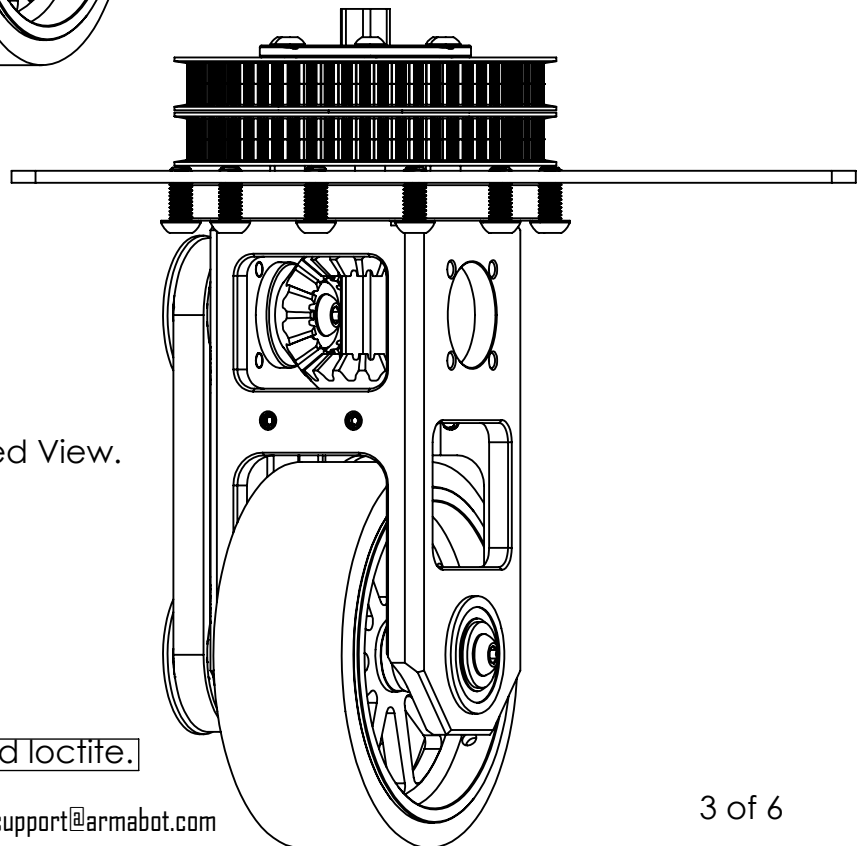
Aluminum, silver-colored, washers.

Cut shaft to 3.258" long for 9mm belt width pulleys or 3.553" for 15mm belt width pulleys. Custom pulleys may need custom width. Tap both ends with 1/4"-20 threads, 1/2" deep.



Add spacers (not included) as necessary for your desired wheel (not included), 2" between bearings.

Finished View.



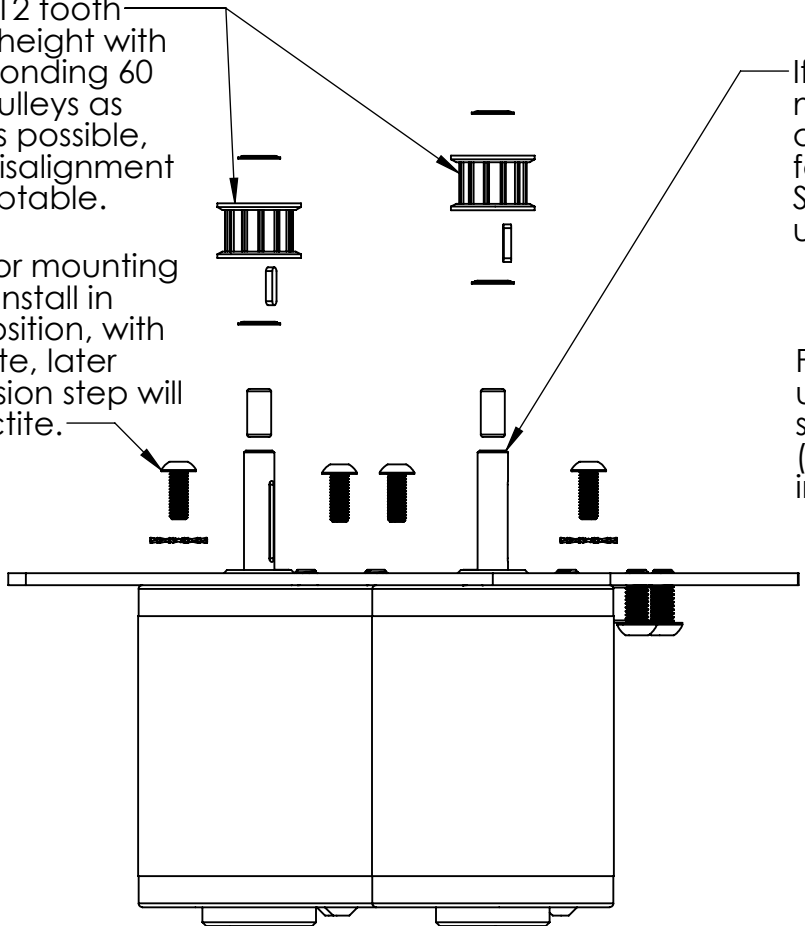
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Match 12 tooth pulleys height with corresponding 60 tooth pulleys as close as possible, slight misalignment is acceptable.

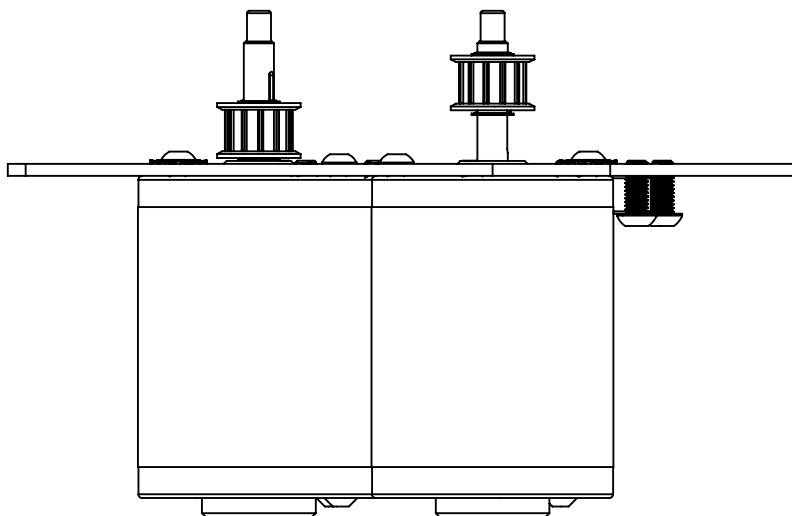
For motor mounting screws, install in loose position, with no Loctite, later belt tension step will add Loctite.

If using MAG encoders (CIM and miniCIM motor control), drill 1/4" diameter, 3/16" deep, hole in shaft for magnet. Adhere with epoxy. Supplied shaft coupler can be used as guide for drilling if desired.

For REV NEO motor, use motor's internal sensors for control (no magnet in shaft installation required).



Module and pulleys hidden for clarity.

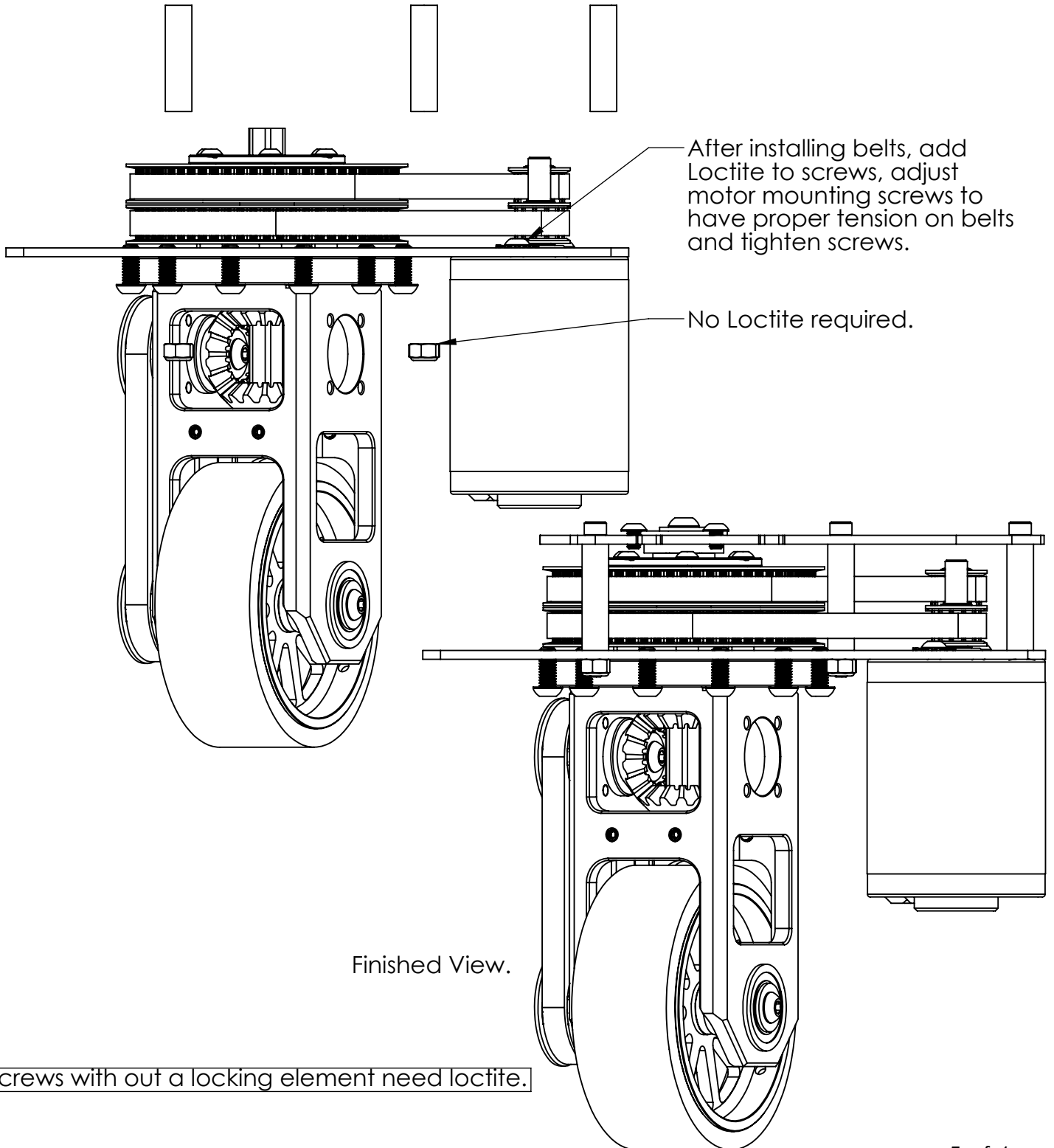


Finished view.

All screws with out a locking element need loctite.

Steel, yellow colored, washer.

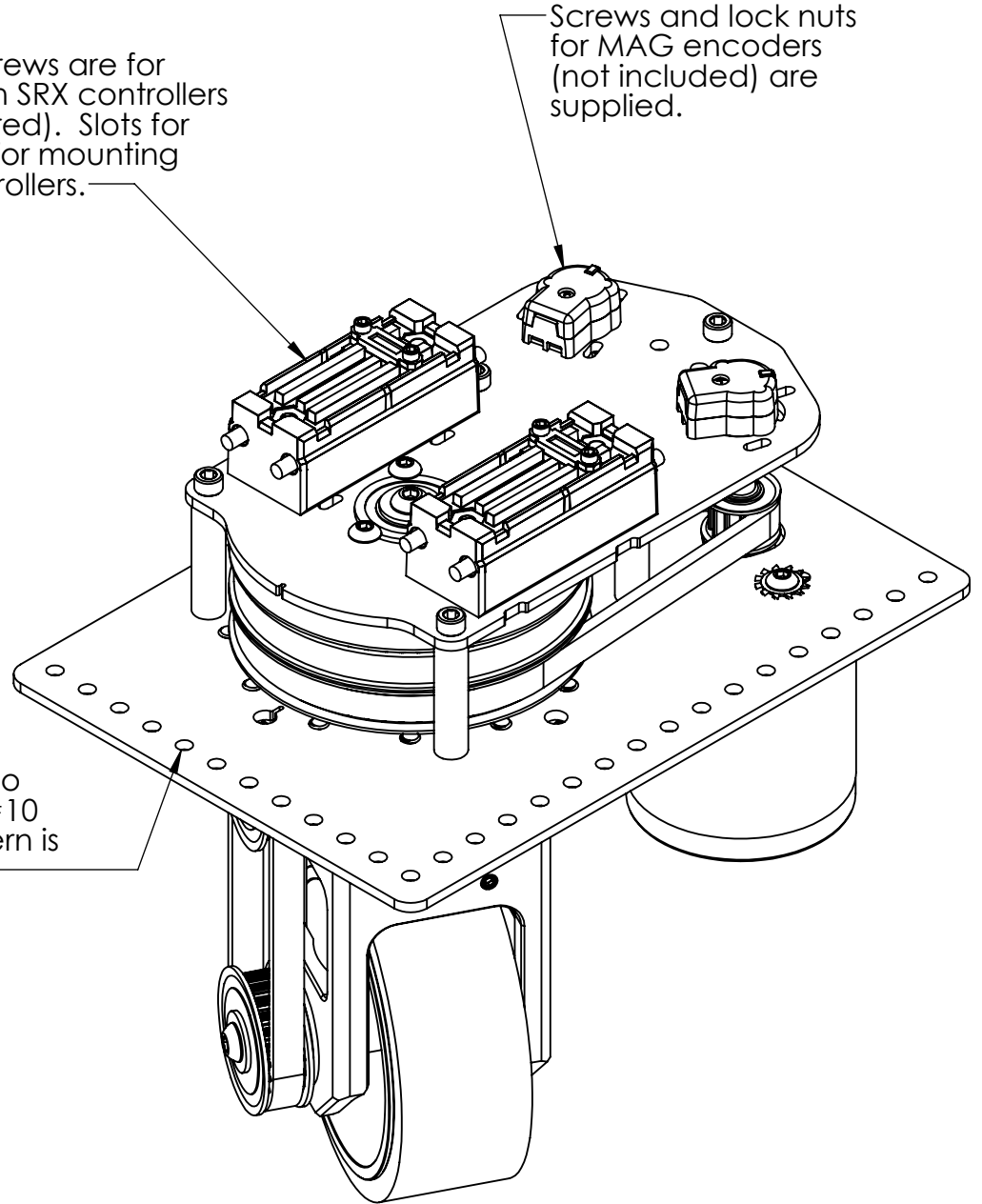
2019 season plates require tapping 10-32 to install these screws.



All screws with out a locking element need loctite.

Holes for #8 screws are for mounting Talon SRX controllers (tapping required). Slots for cable ties are for mounting NEO max controllers.

Screws and lock nuts for MAG encoders (not included) are supplied.



Hole pattern can be used to mount 1" wide tube using #10 screws or 3/16" rivets. Pattern is .196" holes every 0.5".

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