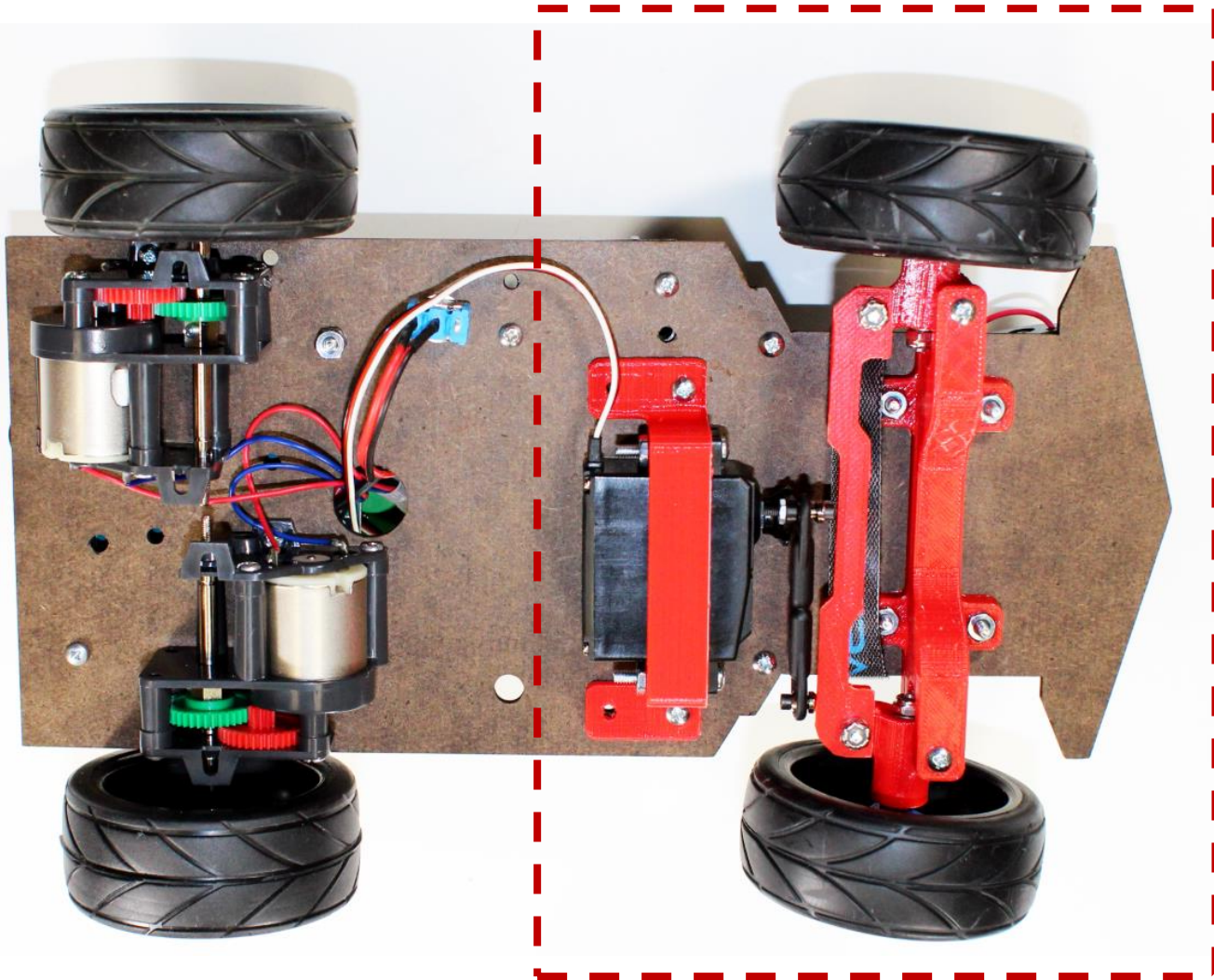


assembly of steering



wear safety glasses



expect some sanding and gluing



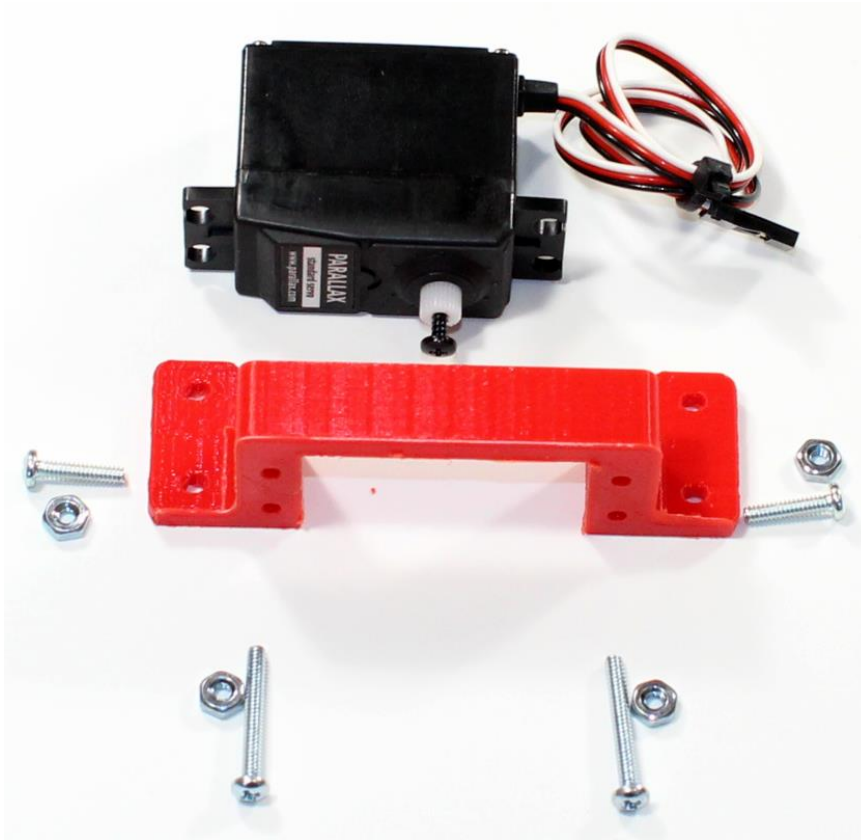
Don't force parts together or they may break. If they do break, then super glue can be used for repair. 3D printed parts may be rough and require sanding so that they fit together ... this is to be expected.

most of the holes in the 3D printed parts need cleaning out



1/8-inch diameter drill bit works well in most cases

parts for mounting the steering servo



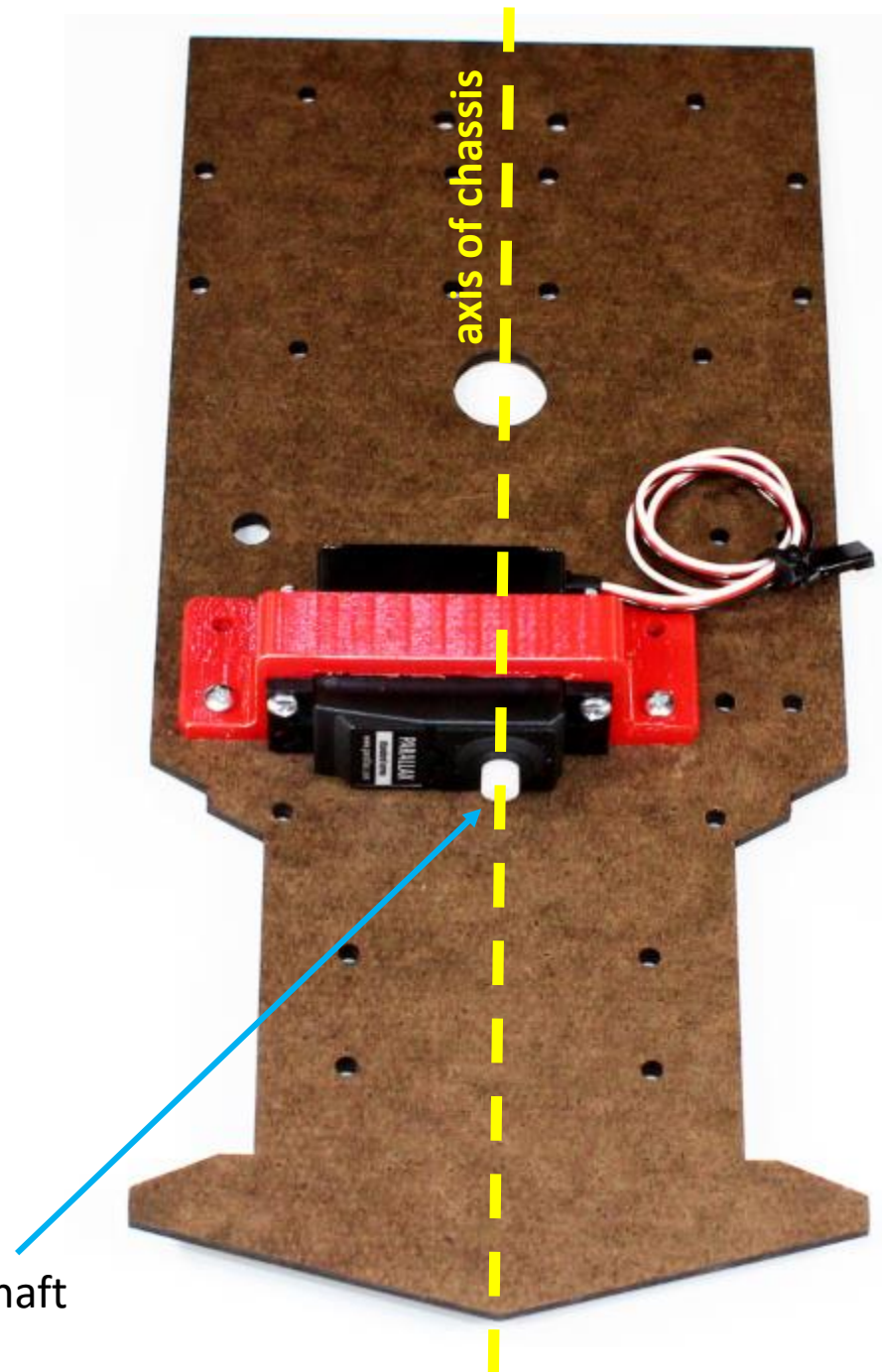
parts:

- 4-40 screws $\frac{3}{4}$ -in or $\frac{7}{8}$ -in long (2)
- 4-40 screws $\frac{1}{2}$ -in long (2)
- 4-40 nuts (4)
- standard servo
- servo mounting bracket

mount the servo to the
bracket and chassis

you really only need two screws for servo
to bracket and for bracket to chassis

turn the servo so that the output shaft
lines up with the axis of the chassis



cut off three sides on the servo horn



original servo horn



this is the only part you use

make outer hole on servo horn larger

(a 3/32-inch diameter drill bit works well)

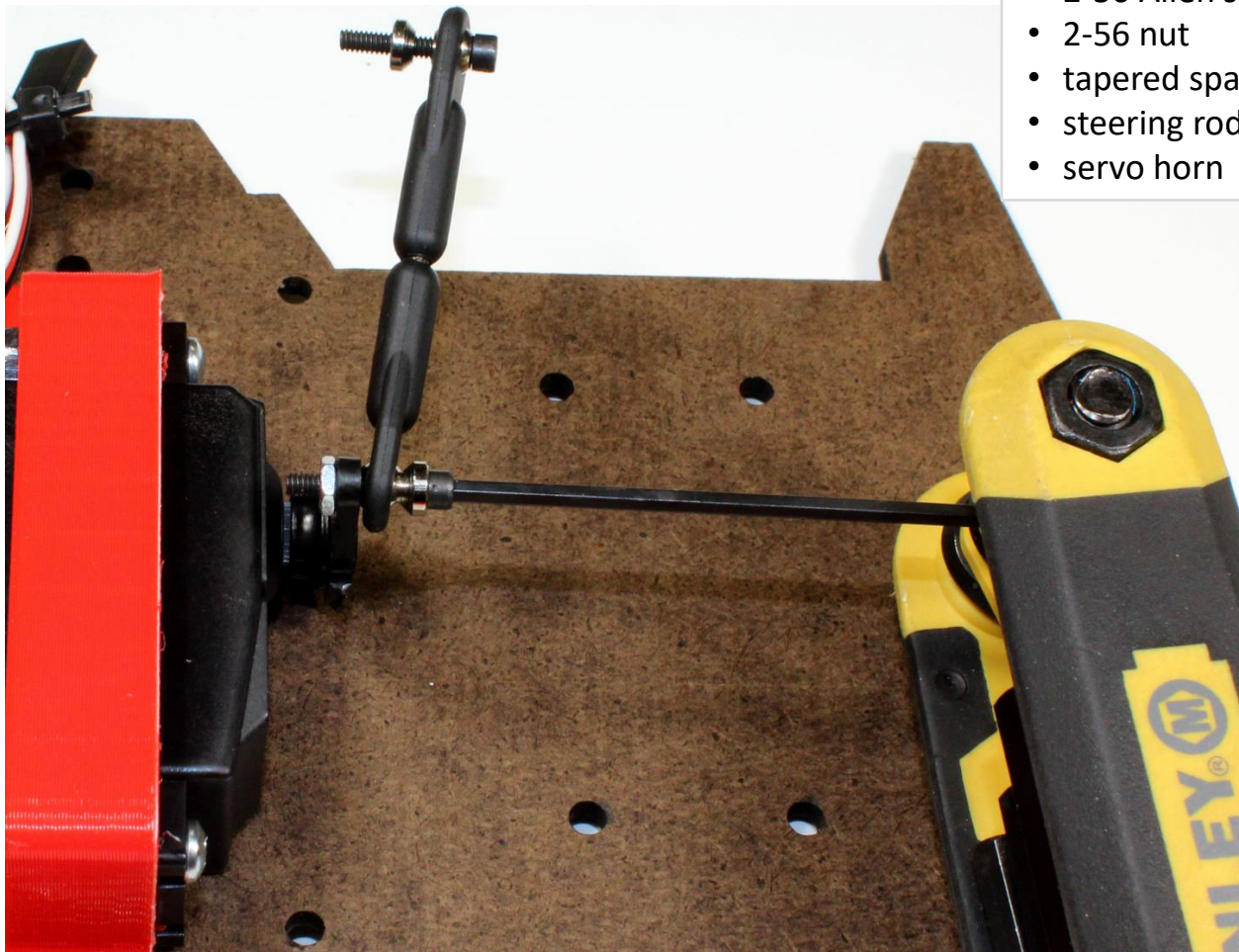


attach servo horn to steering rod

(a 2mm Allen wrench is needed)

additional parts:

- 2-56 Allen screws ½-in long (2)
- 2-56 nut
- tapered spacing washers (2)
- steering rod
- servo horn



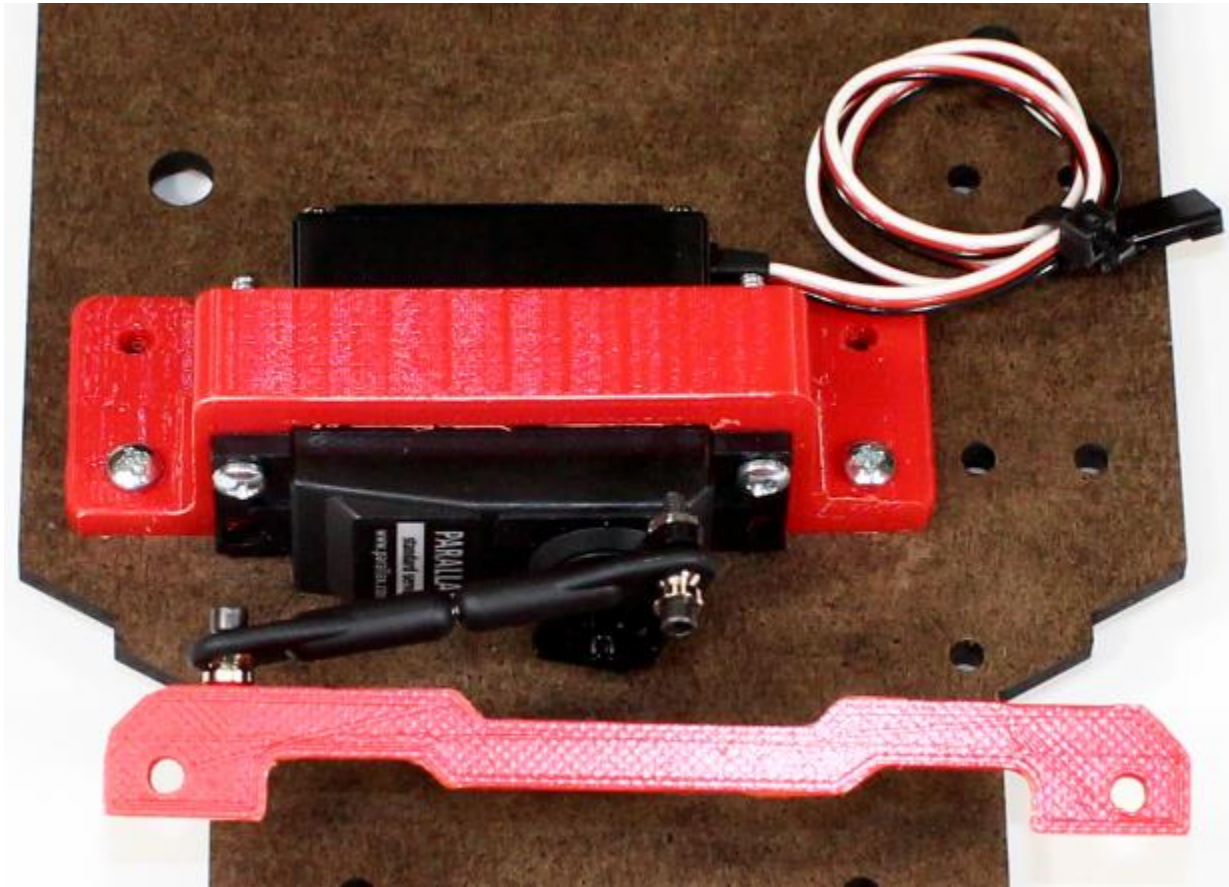
attach steering rod to cross arm



this bolt screws
into the hole

do not drill out this hole! you will be sad if you do

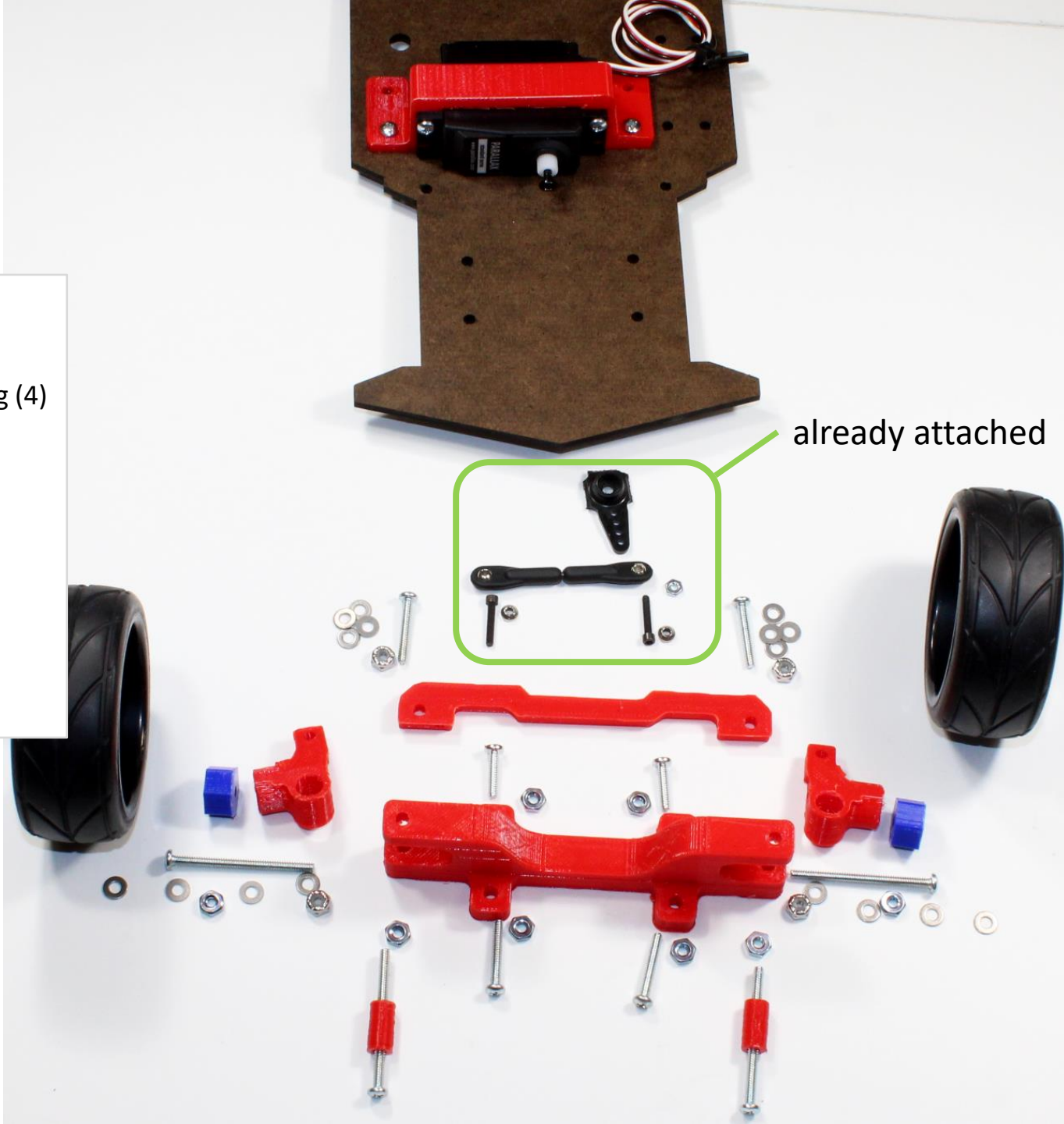
use a 2-mm Allen wrench to screw steering rod onto cross arm



assemble steering

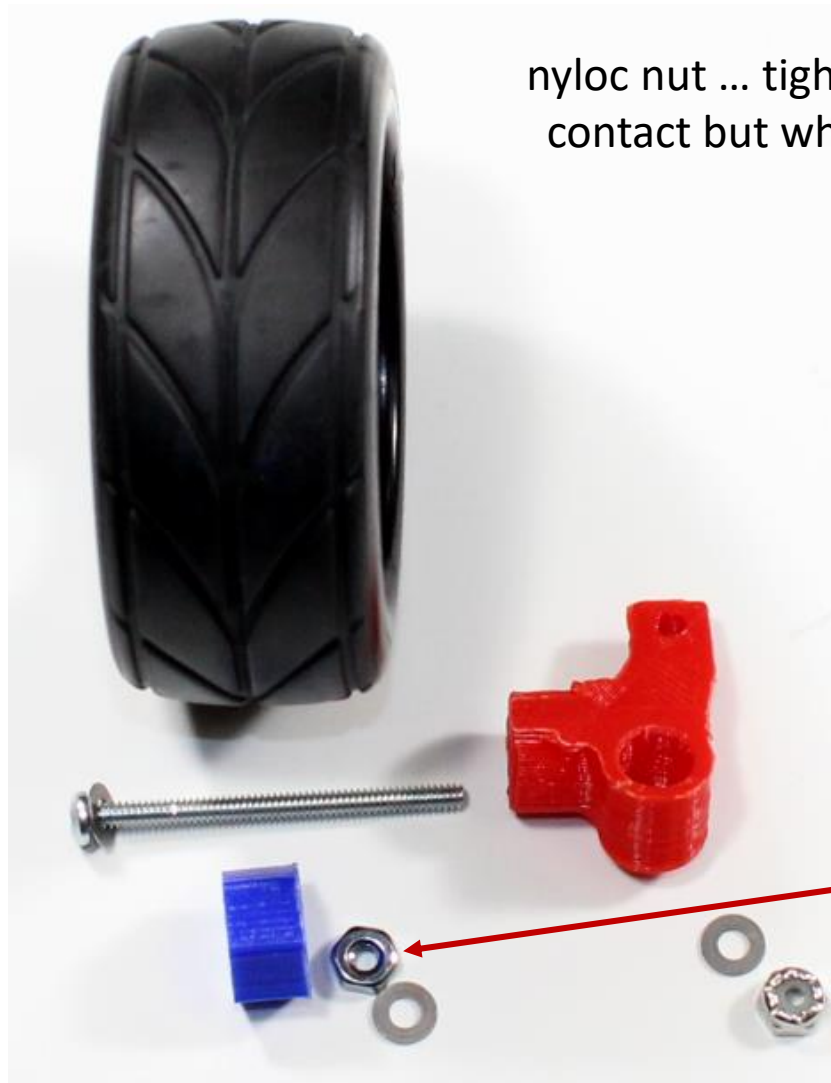
additional parts:

- 4-40 screws 1 ½-in long (4)
- 4-40 screws ¾-in or 7/8-in long (4)
- 4-40 screws ½-in long (2)
- 4-40 nuts (8)
- 4-40 nyloc nuts (4)
- 16 washers
- 3D printed steering knuckle
- 3D printed bushing
- 3D printed steering bracket
- 3D printed cross arm
- 3D printed wheel hex spacers



assemble wheels

ORDER: screw – washer – wheel – blue hex – nut – washer – red steering knuckle – washer - nut



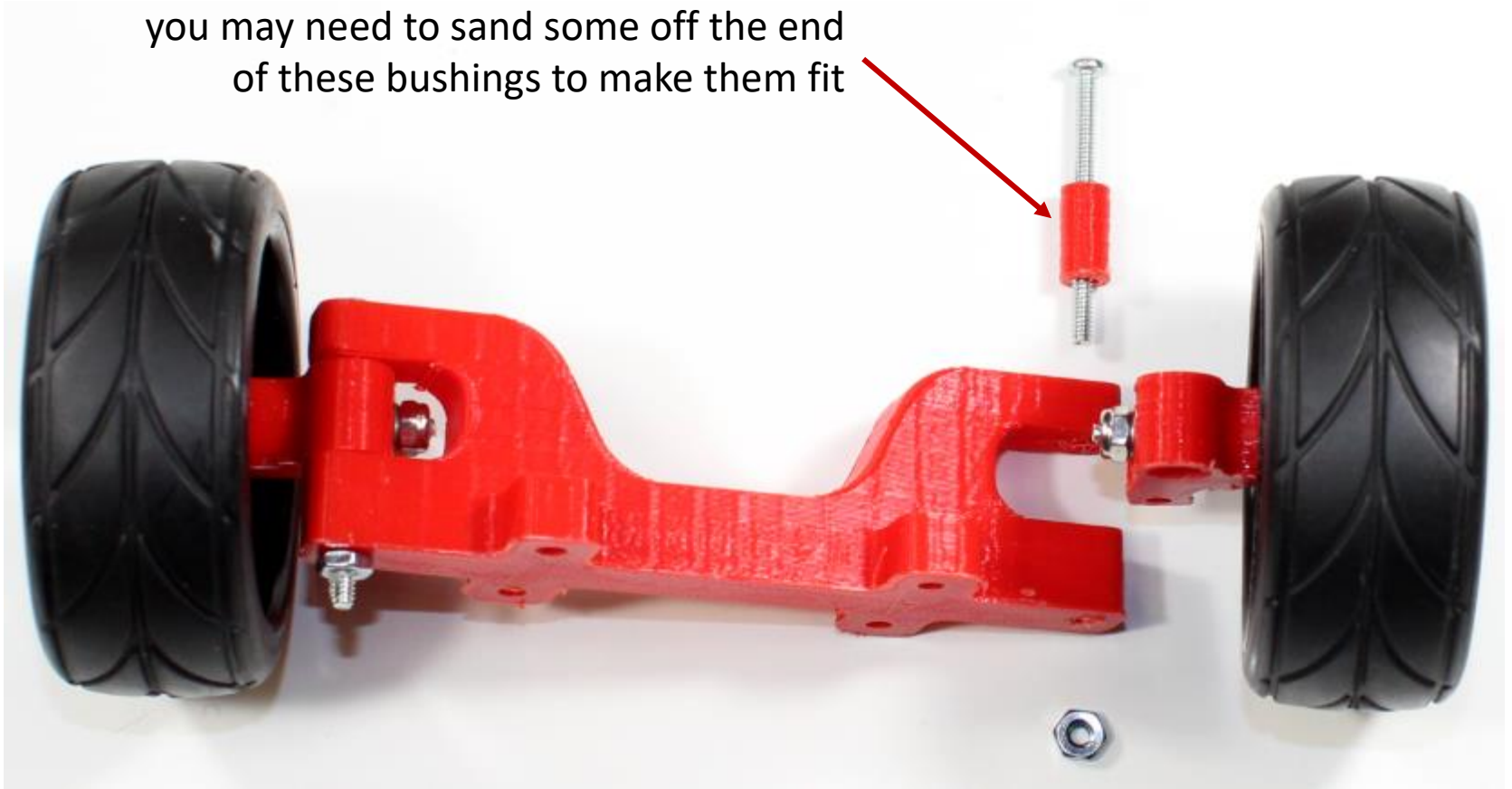
nyloc nut ... tighten until it starts to contact but wheel still spins freely



get this nut very tight against the blue hex

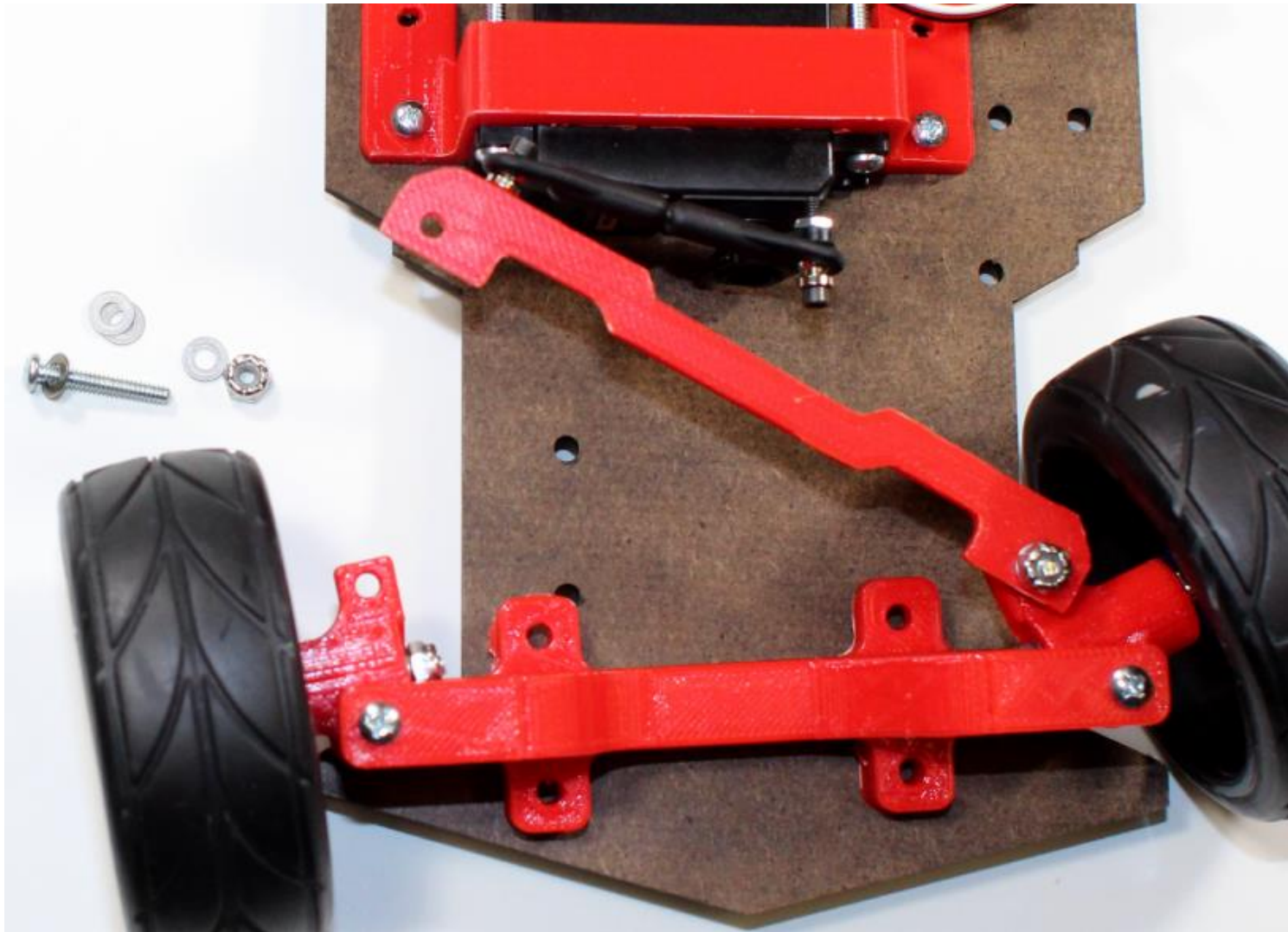
attach wheels to steering bracket

you may need to sand some off the end
of these bushings to make them fit

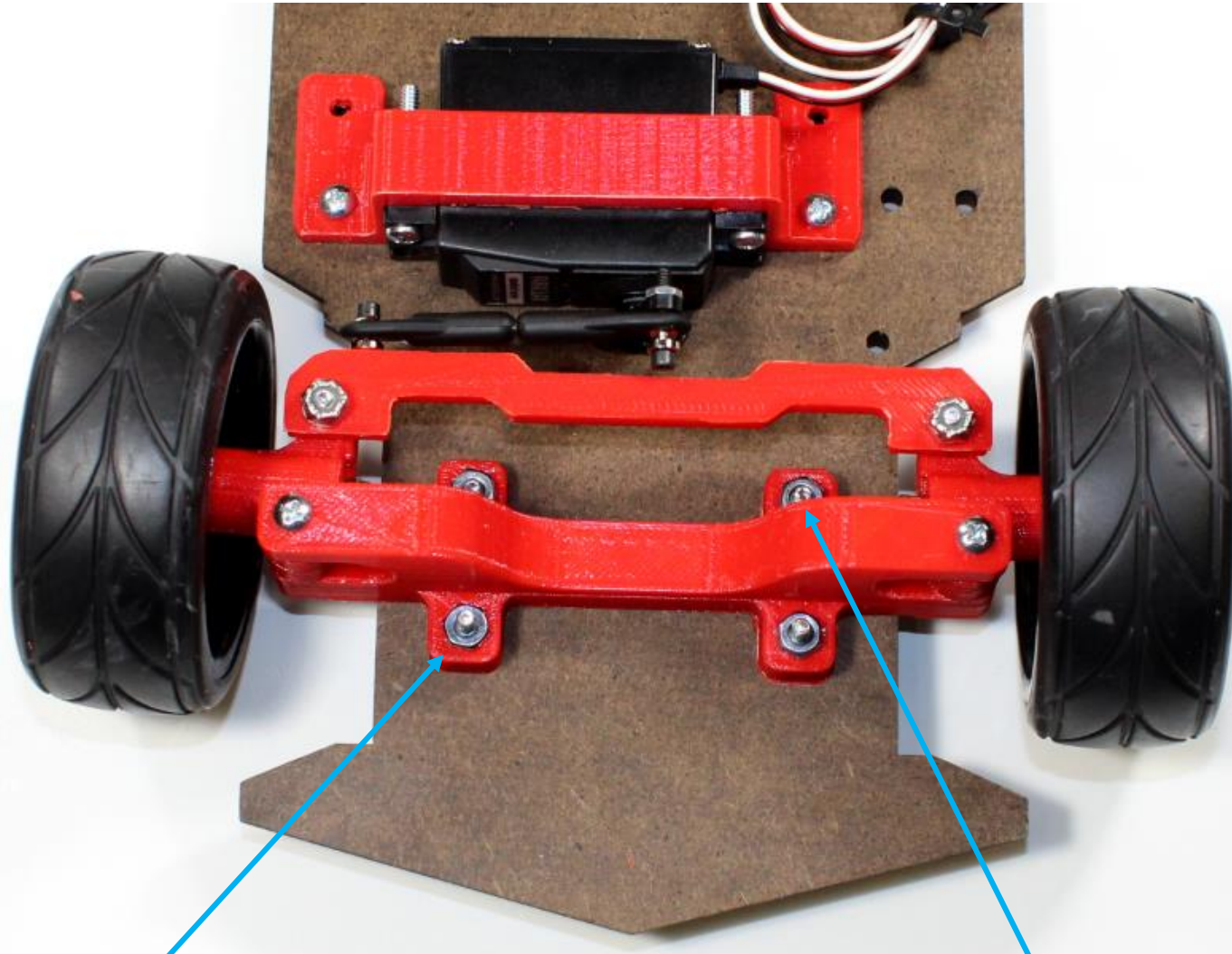


attach cross arm to wheel assembly

ORDER: $\frac{3}{4}$ -in or $\frac{7}{8}$ -in screw – washer – red steering arm – 2 washers – red tie rod – washer – nyloc nut



attach assembly to chassis



use $\frac{3}{4}$ -in or $\frac{7}{8}$ -in screws on front (put these in first), and $\frac{1}{2}$ -in screws in back

completed steering
assembly!

