

VIPER LIFTER ADD-ON

INCLUDED

-  1x Servo  1x Servo Arm & Screw
-  2x Servo Mounts
-  1x Lifter Linkage
-  2x Lifter Arm
-  1x Threaded Round Crossbar
-  1x Steel Lifter Scoop
-  2x Mini 2x1 NutStrip
-  1x Linkage Screw Spacer
-  13x 6-32 x 1/4" Screws
-  4x 6-32 x 1/2" Screws
-  1x Red Jumper Wire

NOT INCLUDED

- Electrical Tape or Heatshrink
- Twist-ties / Zip ties
- Hobby Knife or Mini Flat Screwdriver
- Phillips Screwdrivers #2



1 Attach the **Threaded Round Crossbar** with the **Lifter Linkage** to the **Lifter Arms** using two 6-32x1/2" Screws and the 5/64" Hex Wrench.

2 Attach the **Steel Lifter Scoop** with four 6-32x1/4" Screws.

3 Tighten two **6-32x1/2" Screws** into the two **Mini 2x1 NutStrip**. The picture shows the correct orientation for later mounting to the Viper's top armor.



4 Press the **Servo Mounts** onto the **Servo** in the orientation shown.

5 Gently pry back the middle locking tab of the **Servo** connector with a hobby knife or mini flat screwdriver and slide the red wire out.



6 Remove the top armor from your Viper robot.

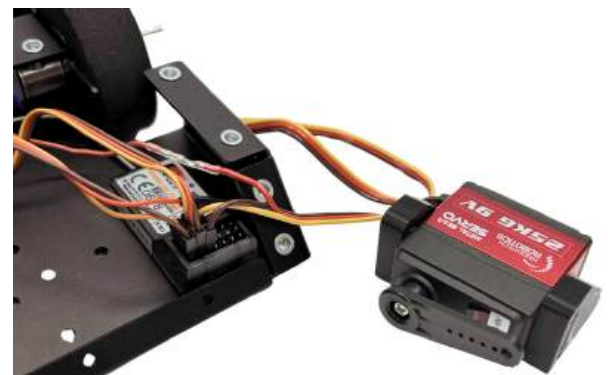
7 Use the **Red Jumper Wire** to connect between the **Servo's** red wire and the Viper's red Terminal Block. Tape over the connection well or use heatshrink. Otherwise it could short circuit on other metal.

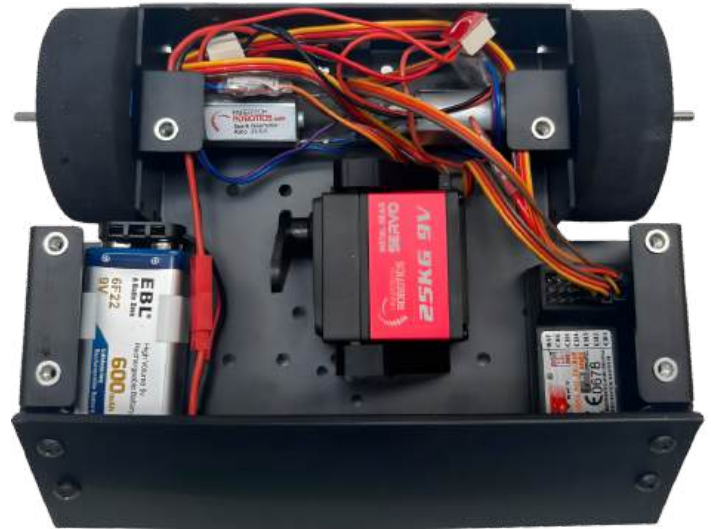
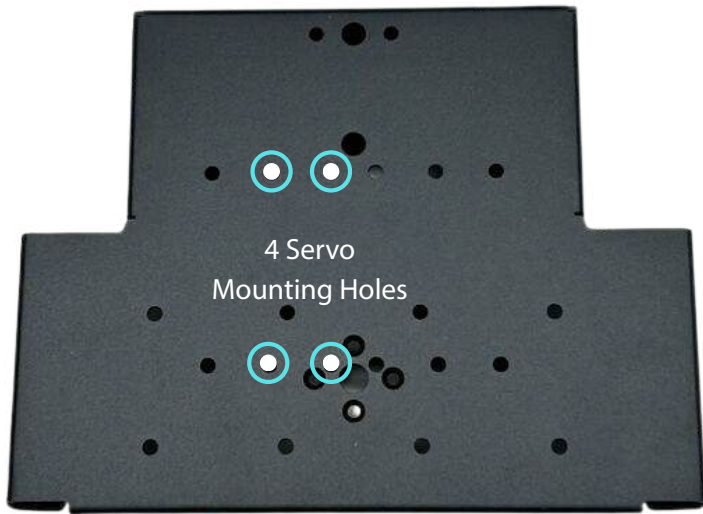


8 Plug the **Servo** connector into the receiver's throttle channel (Ch3) and power on the transmitter and robot (with wheels off the ground). The servo should respond to the transmitter stick.

9 Move the transmitter's throttle stick all the way down to the bottom with trim centered, then power off the robot and transmitter.

10 Attach the **Servo's** single arm pointing horizontal (as pictured) using the Servo's M3 Phillips screw.





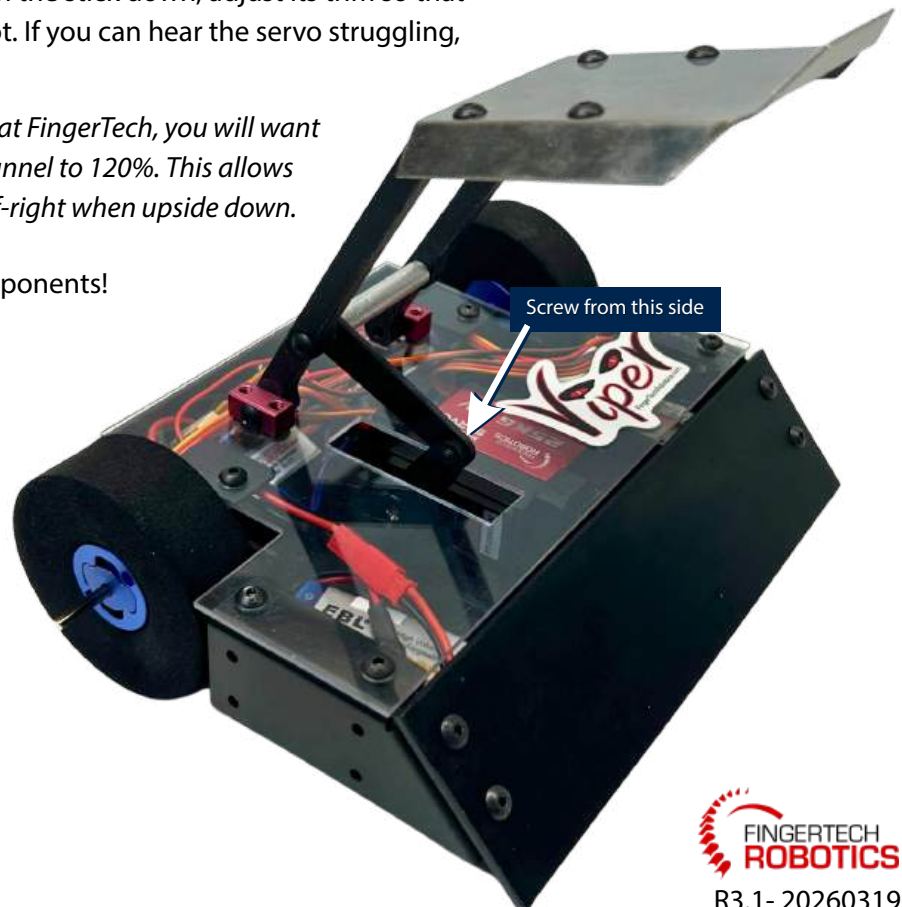
- 11 Mount the **Servo** to the chassis with four **6-32x1/4" Screws**.
*Wire management is important - Twist-ties/Zip ties can be helpful.
- 12 Attach the Lifter to the Viper using four **6-32x1/4" Screws** into the **Mini 2x1 NutStrip**.
- 13 Attach the **Lifter Linkage** to the **Servo** arm using a **6-32x1/4" Screw** and **Linkage Screw Spacer**. When tightened, the **Lifter Linkage** should still be able to move freely.



- 14 Reattach the Viper's top armor.
- 15 Power on the transmitter* and robot. With the stick down, adjust its trim so that the Lifter just touches the top of the robot. If you can hear the servo struggling, adjust the trim up a notch until it's quiet.

**If your transmitter was not purchased at FingerTech, you will want to adjust the endpoints of the servo channel to 120%. This allows the servo to move further and helps self-right when upside down.*

- 16 All done! Use this lifter to topple your opponents!



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