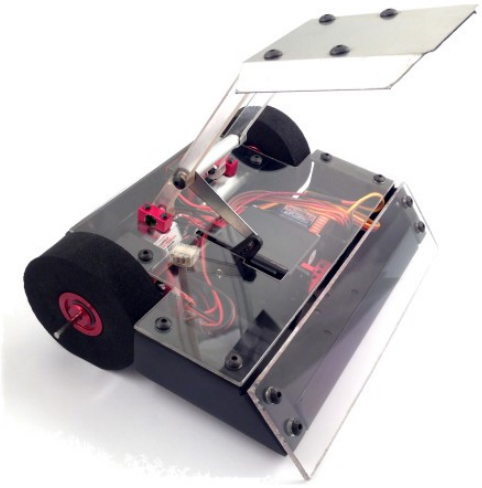
FINGERTECH ROBOTICS

VIPER LIFTER ADD-ON KIT



Kit Includes:			
1	Servo, plastic single arm	2	2x1 Mini NutStrip
2	Servo Mounts	1	1/16" Hex Wrench
1	Lifter Linkage	9	4-40 x 1/4" Screws
2	Lifter Arms	8	6-32 x 1/4" Screws
1	Threaded Round Crossbar	4	6-32 x 1/2" Screws
1	Steel Lifter Scoop	1	Red Wire Jumper
Not Included:			
-	Electrical Tape or Heatshrink	-	#2 Phillips screwdriver
-	Hobby knife or mini flat screwdriver	-	Twist ties

1. Attach the Threaded Round Crossbar with the Lifter Linkage to the Lifter Arms using two 6-32x1/2" Screws and your Viper's 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 2x1 Mini NutStrip. The picture shows the correct orientation for later mounting to the Viper's top armor.

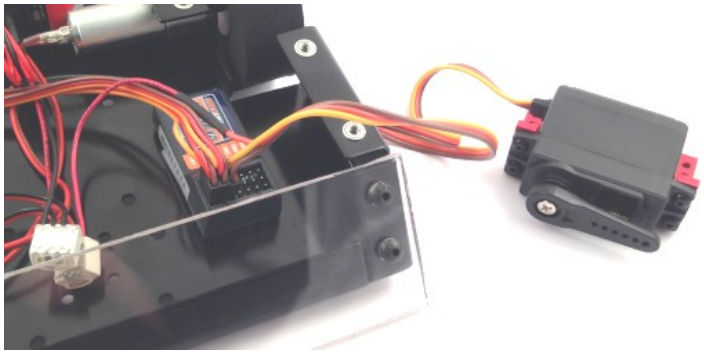
4. Attach the Servo Mounts to the Servo with four 4-40x1/4" Screws using the 1/16" Hex Wrench.

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.

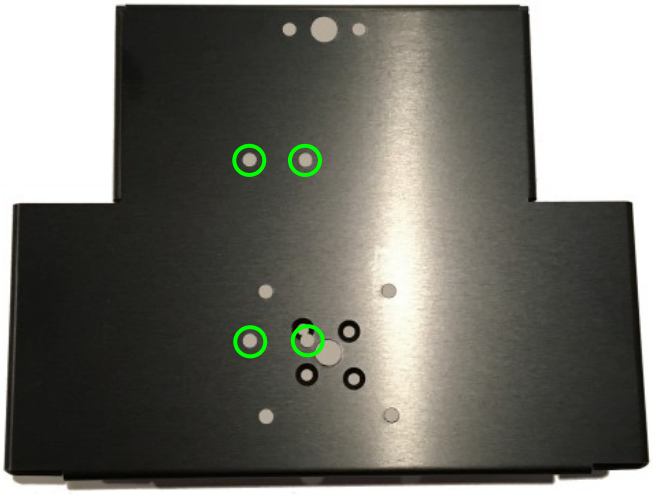
7. Use the Red Wire Jumper to connect between the red Servo wire and the Viper's red Terminal Block. Tape over the connection well or use heatshrink. Otherwise it could short circuit on other metal.

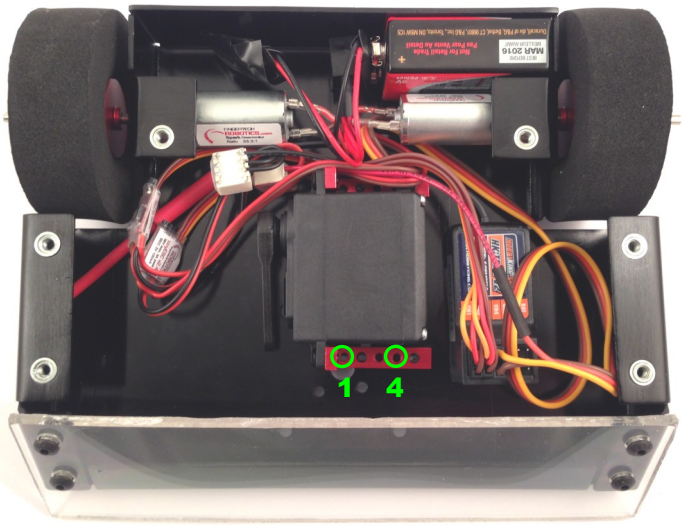
8. Plug the Servo connector into the receiver's throttle channel (Ch3) and power on the transmitter and robot (with wheels off the ground). The servo should respond to the transmitter stick.



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

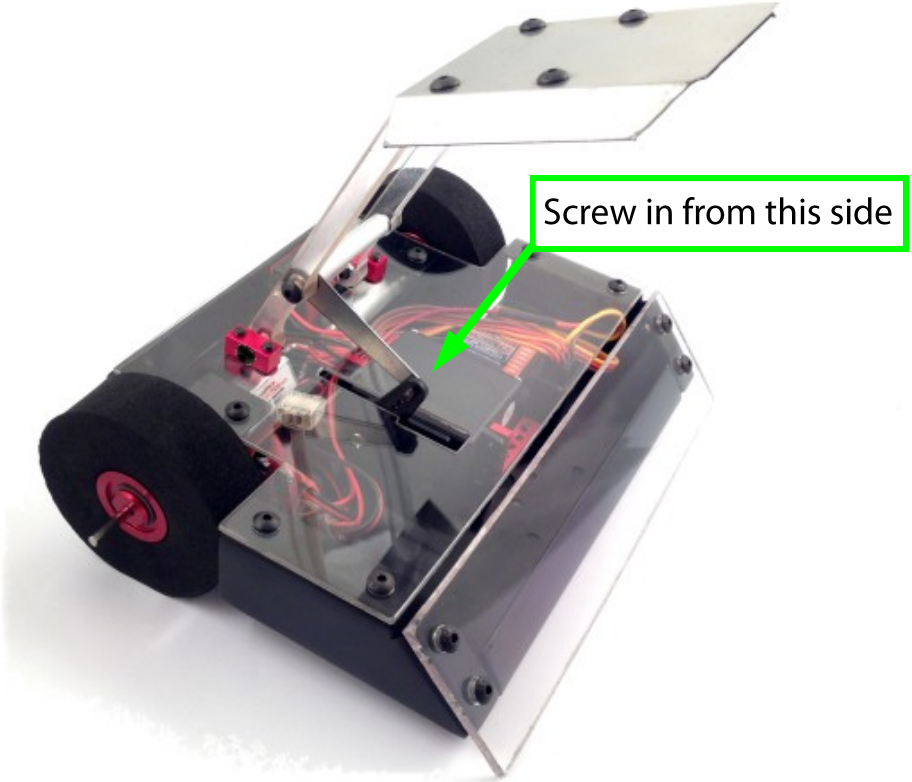
10. Attach the Servo's plastic single arm pointing horizontal (as pictured) using the Phillips screw from the Servo's accessory bag.





10. Mount the Servo to the chassis with four 4-40x1/4" Screws. Wire management is important - keep wires out of the wheels. Twist-ties can be helpful.

11. Attach the Lifter to the Viper's top armor using four 6-32x1/4" Screws into the 2x1 Mini NutStrip.



12. Attach the Lifter Linkage to the Servo arm using a 4-40x1/4" Screw. Leave it just loose enough for the Lifter Linkage to move freely.

13. Reattach the Viper's top armor.

14. 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.

15. All done! Use this lifter to topple your opponents!

*Note - 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.