GUIDE FOR BUILDING THE TUMBLER
### CHASSIS BUMPER, 15 HOLE

![A15 CHASSIS BUMPER, 15 HOLE](image1.jpg)

### CHASSIS RAIL, 16 HOLE

![R15 CHASSIS RAIL, 16 HOLE](image2.jpg)

### PLATE, 5 X 15 HOLE

![P15 PLATE, 5 X 15 HOLE](image3.jpg)

### 1" STANDOFF

![B1 1" STANDOFF](image4.jpg)

### 3" SHAFT

![SQ3 3" SHAFT](image5.jpg)
[NK] 8-32 KEPS NUT

[SP1] SPACER THIN

[COL] COLLAR

[BR] POP RIVETS

[BF] BEARING FLAT

[SS2] 1/4" MOTOR SCREW

[S2] 1/4" SCREW

[S3] 3/8" SCREW

[S4] 1/2" SCREW
[M29] MOTOR CONTROLLER 29
(not shown to scale)

[MOT] MOTOR
(not shown to scale)

[W5] WHEELS, LARGE 5", KNOBBY
(not shown to scale)

OPTIONAL [NOT INCLUDED]

[BP] 7.2V RECHARGEABLE BATTERY
(optional accessory, not shown to scale)

[CTX] CORTEX
(optional accessory, not shown to scale)

[VMC] MICRO CONTROLLER
(optional accessory, not shown to scale)

[AH] ANTENNA HOLDER
(optional accessory, not shown to scale)

[BB] 7.2V AA BATTERY BOX
(optional accessory, not shown to scale)

[RX75] RF RECEIVER & CABLE
(optional accessory, not shown to scale)

[BST] BATTERY TIE DOWN
(optional accessory, not shown to scale)

[AT] ANTENNA TUBE
(optional accessory, not shown to scale)
3-WIRE MOTOR

2-WIRE MOTOR WITH MOTOR CONTROLLER 29
10

11
[OPTIONAL]
OR SKIP TO 13
13-14

[OPTIONAL] OR SKIP TO 15

13

[NK]x4
[S3]x4
[BST]x2

14

[BP]x1
[OPTIONAL]
OR SKIP TO 16

[S3]x4
[CTX]x1

[NK]x4
16-19

X1 [OPTIONAL]
OR SKIP TO 20

16

[S3]x4
[VMC]x1
[NK]x4

17

[S3]x2
[NK]x2
[Rx75]x1
18

[S3]x1

[AH]x1

[NK]x1

19

[AT]x1
[CTX] WIRING
[3 WIRE MOTORS]
[CTX] WIRING
[2 WIRE MOTORS]
[VMC] WIRING

OR

[MOT]

[M29] RED TO BLACK

[MOT]
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