



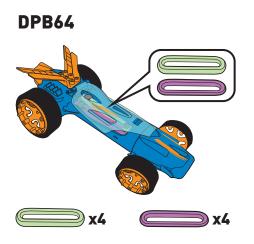
## **WELCOME TO SPEED WINDERS™**

HOT WHEELS® SPEED WINDERS™ ARE RUBBER BAND-POWERED VEHICLES THAT LET KIDS RACE, EXPERIMENT, AND DISCOVER DIFFERENT WAYS TO PLAY WITH ENERGY! THIS TUNE-UP GUIDE IS PACKED WITH HELPFUL TRICKS, TIPS, HACKS AND LESSONS TO HELP YOU BUILD THE ULTIMATE ENGINE, TAKE ON YOUR FRIENDS, AND GO FOR THE WIN!

DPB65

## HERE'S WHAT YOU GET

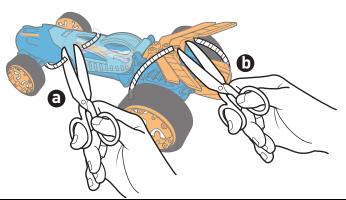
EACH SET INCLUDES: 1 SPEED WINDERS™ CAR AND 10 RUBBER BANDS.



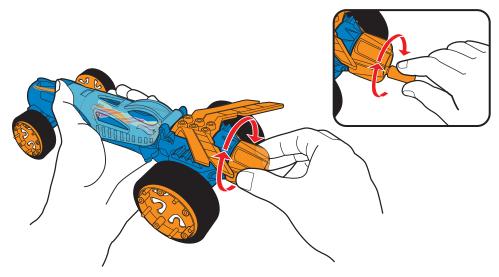
COLORS AND DECORATIONS MAY VARY.

### BEFORE YOU START

REMOVE THE CABLE TIES WITH SAFETY SCISSORS (NOT INCLUDED). ADULT ASSISTANCE RECOMMENDED.



1. TURN THE CRANK OR KNOB CLOCKWISE TO WIND THE RUBBER BAND ENGINE.





🚹 CAUTION: OVERWINDING THE CRANK MAY RESULT IN BROKEN RUBBER BANDS.

#### 2. PUSH THE LAUNCH BUTTON AND GO!

EXPERIMENT! WHEN YOU WIND THE CRANK MORE, DOES YOUR SPEED WINDERS™ CAR **GO FASTER AND FARTHER?** 



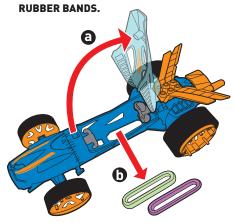


TIP: IF THE CAR STEERS SHARPLY TO THE LEFT OR RIGHT EVEN WHEN THE WHEELS ARE STRAIGHT, YOU OVERWOUND THE CRANK! WINDING THE CRANK A MODERATE NUMBER OF TIMES BEFOR EACH LAUNCH CAN HELP PRESERVE THE RUBBER BANDS.

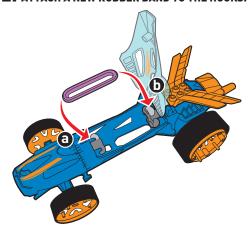


# **MODIFY YOUR ENGINE**

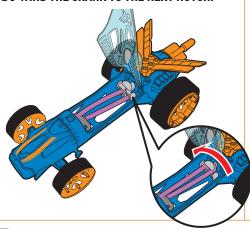
1. OPEN THE CANOPY AND REMOVE RUBBER BANDS



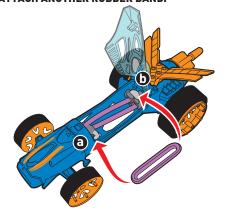
2. ATTACH A NEW RUBBER BAND TO THE HOOKS.



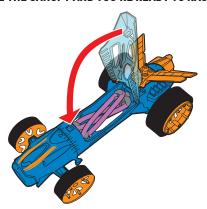
3. WIND THE CRANK TO THE NEXT NOTCH.

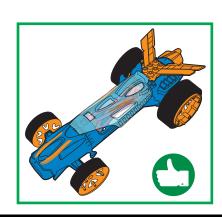


4. ATTACH ANOTHER RUBBER BAND.



5. CLOSE THE CANOPY AND YOU'RE READY TO RACE!



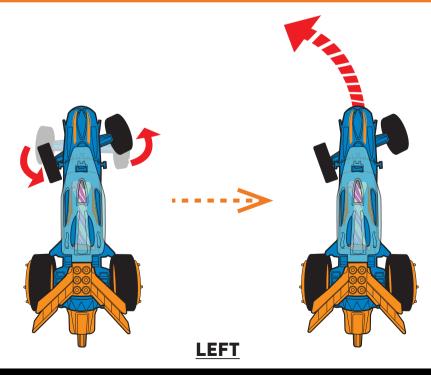


## **ADJUST STEERING**

YOUR TORQUE TWISTER™ COMES WITH ADJUSTABLE STEERING.
MOVE THE FRONT WHEELS TO MAKE YOUR CAR TURN LEFT OR
RIGHT WHILE RACING!

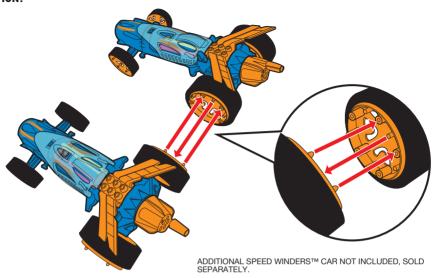
RIGHT

RIGHT

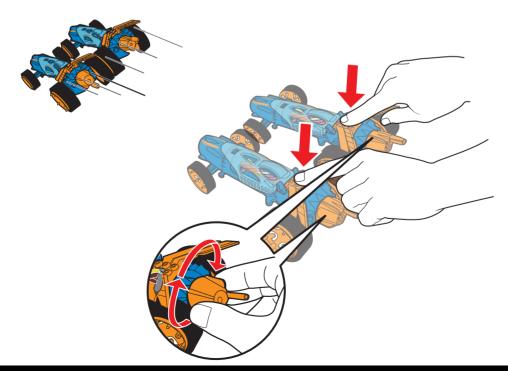


# MAKE A SUPER POWERFUL 8-WHEEL RACE CAR

1. TRY COMBINING 2 SPEED WINDERS™ CARS TOGETHER FOR SIDE-BY-SIDE TWIN ENGINE RACING

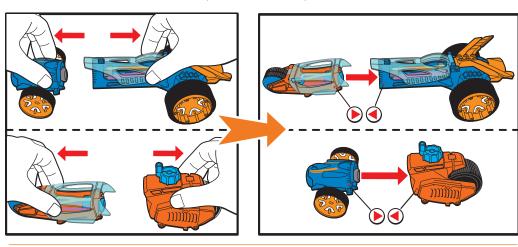


### 2. WIND THEM BOTH UP AND LAUNCH! HOW FAST AND FAR CAN THEY GO?

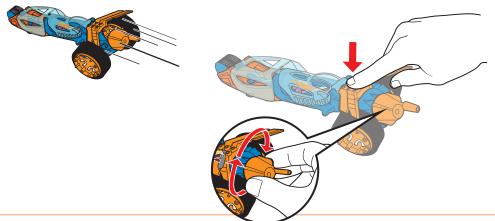


# MAKE A DUAL-ENGINE INLINE DRAGSTER

#### 1. COMBINE WITH TWISTED CYCLE™ (SOLD SEPARATELY)! MIX & MATCH PARTS TO MAKE A...

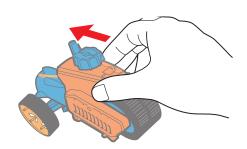


## **1A.** DUAL-ENGINE INLINE DRAGSTER!



### 1B. OR A MINI-RACER!

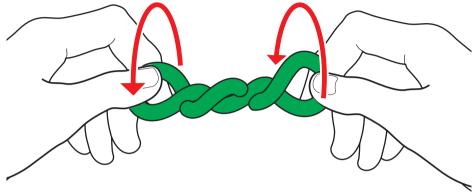




### SCIENCE: ALL ABOUT ENERGY!

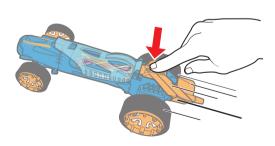
WHETHER THEY USE GASOLINE, ELECTRICITY, OR SOME OTHER TYPE OF FUEL, ALL MOTORCYCLES AND CARS HAVE ENGINES THAT CREATE ENERGY TO MAKE THEM MOVE. YOUR SPEED WINDERS<sup>TM</sup> CAR HAS AN ENGINE, TOO: A RUBBER BAND!





Objects that store energy when their shape is changed have POTENTIAL ENERGY. Rubber bands are a great example of potential energy. When a rubber band is wound up, it will always want to return to its original shape. This is called ELASTIC POTENTIAL ENERGY because the energy is stored in elastic materials as a result of stretching or compressing.





When you launch your Speed Winders<sup>TM</sup> car, it races away! It moves because your rubber band engine is unwinding and releasing all of its stored-up energy. Scientists call this kind of energy KINETIC ENERGY. When your Speed Winders<sup>TM</sup> car rolls to a stop, check out the rubber band! Has the shape of the rubber band changed? Has it returned to its original shape?

# ENGINEERING: DISCOVER MORE WAYS TO MAKE POWER

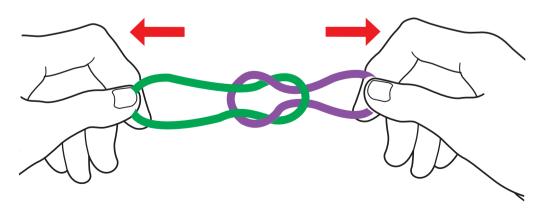
DID YOU KNOW YOU CAN USE ALMOST ANY RUBBER BAND TO POWER YOUR SPEED WINDERS™ CAR?

GRAB A RUBBER BAND FROM SOMEWHERE IN YOUR HOUSE AND EXPERIMENT WITH IT.





INCLUDES 10 RUBBER BANDS, ADDITIONAL RUBBER BANDS NOT INCLUDED.

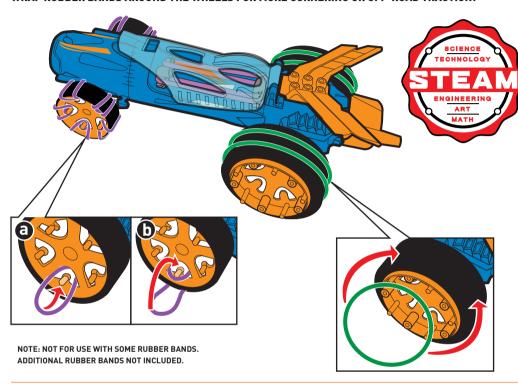


IF YOUR RUBBER BAND IS TOO SHORT TO FIT ON THE HOOKS, SIMPLY LOOP TWO RUBBER BANDS TOGETHER AND PULL ON THE ENDS TO MAKE THEM TIGHT.

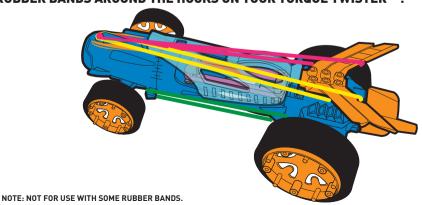
### **ENGINEERING: EXPERIMENT WITH TRACTION**

TRACTION is the ability of a car tire to grip the surface below it. Engineers look for ways to increase traction so a car can grip the road to turn faster or safely travel over rough surfaces.

TRY THESE EXPERIMENTS TO SEE IF YOU CAN INCREASE THE TRACTION OF YOUR TORQUE TWISTER™! WRAP RUBBER BANDS AROUND THE WHEELS FOR MORE CORNERING OR OFF-ROAD TRACTION!



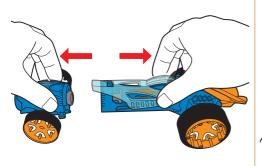
HERE'S ANOTHER TIP: FOR RAD CUSTOM STYLING AND STORAGE, WRAP EXTRA RUBBER BANDS AROUND THE HOOKS ON YOUR TORQUE TWISTER™!



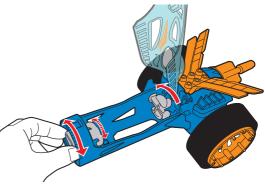
### PERFORMANCE TIPS

IF YOU ARE HAVING PROBLEMS ATTACHING THE RUBBER BANDS INSIDE THE CAR, ADJUST THE POSITIONS OF BOTH HOOKS SO IT WILL BE EASIER TO HOOK THE RUBBER BANDS ON.

1. TAKE THE CAR APART TO ACCESS THE FRONT HOOKS.



2. ROTATE AND ADJUST BOTH HOOKS. FRONT HOOKS SHOULD BE HORIZONTAL AND THE BACK HOOKS SHOULD BE IN A CROSS POSITION.



## CHECK OUT THESE OTHER AWESOME SPEED WINDERS™!



EACH SOLD SEPARATELY, SUBJECT TO AVAILABILITY. COLORS AND DECORATIONS MAY VARY.

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