

Maglev E Vehicle Kit

User Guide

PITSCO
EDUCATION

Materials Included

- 2 chassis plates
- 4 magnets
- Self-adhesive tabs
- Motor with presoldered leads
- Propeller

Items Needed (not included)

- Wire strippers
- Cool-melt glue gun and glue slugs
- Scissors or hobby knife
- Maglev Track II with Maglev E Track Power Supply*
- Correction fluid or white pen (optional)

*Pitsco *only* recommends using the Maglev E Track Power Supply to power the Maglev Track II.

Safety

- Take care not to cut yourself or anyone else with the wire strippers and scissors or hobby knife.
- Do not get cool-melt glue on you or anyone else – and do not touch the glue gun's hot tip to skin.
- Be sure to use the safety guidelines in the *Maglev Track II User Guide* when using this vehicle on the track.

Before Building the Kit

Before building the Maglev E Vehicle, the Maglev Track II should be set up (Figure 1). It does not need to be powered at this time.



Figure 1

Building the Kit

1. Holding the magnets so they are stuck together, take them to the Maglev Track II and hold them above one of the strip magnets on the track (Figure 2). If they attract (pull toward) the strip magnet, turn them around. You want them to repel (push away from) the magnet strip.



Figure 2

You can mark the sides that repel the strip magnet with correction fluid or a white pen to help you remember which side is which (Figure 3).

2. Place the self-adhesive tabs in each corner of one chassis plate (Figure 4). Peel the backing off the tabs.
3. Place the magnets on the tabs, keeping the side of the magnets that repels the track facing away from the chassis plate (Figure 5).



Figure 3

4. Take the second chassis plate and draw your design for the motor stand on it (Figure 6). Plan for at least 1-3/8" between the motor post and the chassis plate so the propeller blades don't hit it.



Figure 4



Figure 5



Figure 6

5. Cut out the stand (Figure 7).
6. Turn the chassis plate so the magnets face down. Using cool-melt glue (Figure 8), attach the motor stand onto the chassis where you wish – make sure the stand is perpendicular to the chassis plate (Figure 9).



Figure 7



Figure 8



Figure 9

7. Strip the ends of the two motor leads about 3/4" (Figure 10).
8. Using cool-melt glue, attach the motor to the top of the motor stand (Figure 11, this page, and Figure 12, next page).



Figure 10

Caution: Make sure the motor is set far enough back on the motor stand so the propellers do not hit the stand.



Figure 11



Figure 12



Figure 13

9. Position the ends of the motor leads to the outside of the chassis plate and secure them there with a small amount of cool-melt glue (Figure 13). Make sure the stripped ends are frayed and stick out a little from the plate so they will make contact with the sides of the track (Figure 14).
10. Turn the side of the propeller with the writing on it to face the motor post. Push the propeller onto the end of the motor post (Figure 15).



Figure 14

You are now ready to let your Maglev E Vehicle glide down the Maglev Track II powered by the Maglev E Track Power Supply. Follow the safety guidelines and instructions in the *Maglev Track II User Guide*.



Figure 15