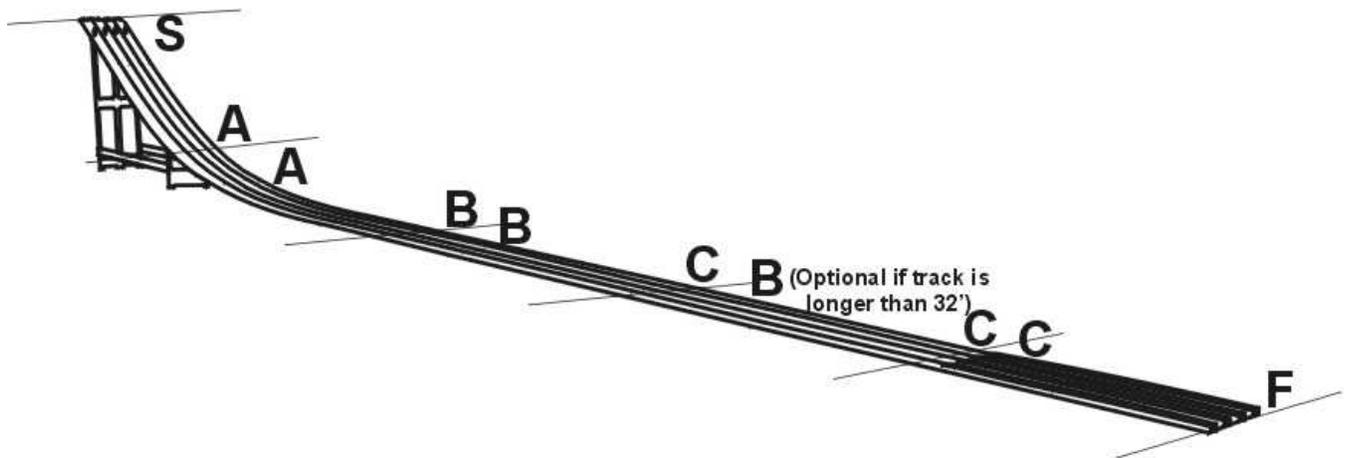


Track Manual for the Micro Wizard Quick Pack Track

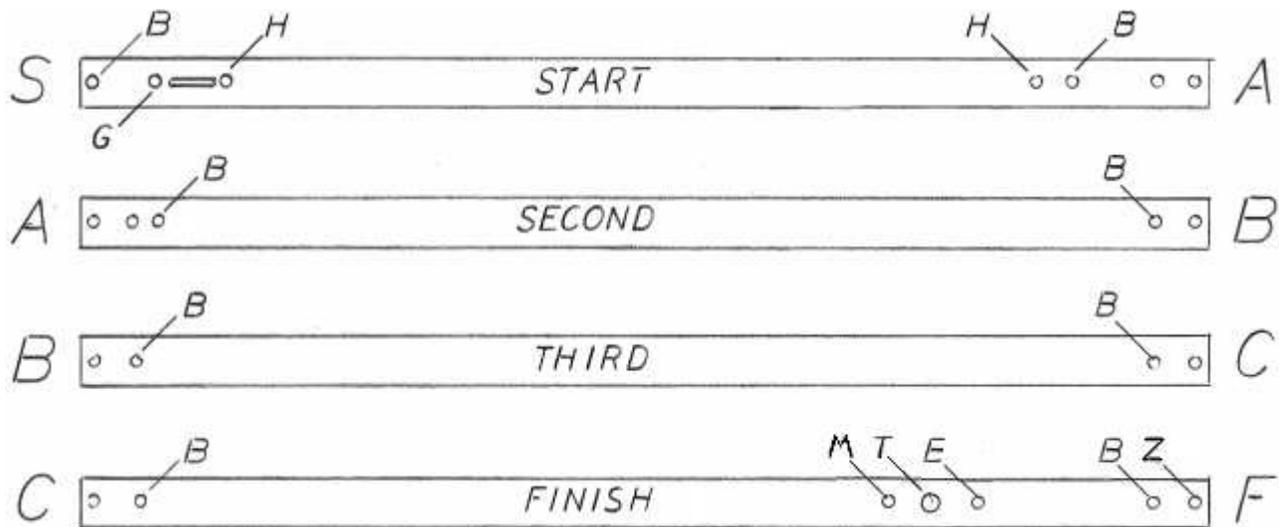
Congratulations on your purchase of a new Micro Wizard Pinewood Derby Track. Great attention has been paid to design and detail to generate a 'no fuss' and easy to assemble track that will provide decades of enjoyment. Please take a moment to read through these simple instructions to familiarize you with the components and the assembly concepts.

These instructions apply only to the 'Freedom' aluminum series tracks, Version 2. A video version of these installation instructions can be found at <http://microwizard.com>.

Track Sections:



There are four different types of lane sections as indicated in the preceding drawings. Each section has its own unique hole pattern. Your first job with the 'Freedom' series is to nest together the sections to construct the specific width track that you ordered. Begin by sorting the sections face up and aligned in the same direction. The bottoms of the lanes are labeled with S (start), A, B, C, and F (finish). Once the lanes are bound together you will join them A to A, B to B, and C to C. There will be multiple B/C sections if your track is more than 32 feet long. Please note that the 'B' end of each additional B/C section is attached to the 'C' end of the previous B/C section.



The purpose of each set of holes is as follows:

B – Mounting of the Binding Plates

H – Mounting of the Hinged Track Legs

G – Attachment of the Start Gate

M – Attachment of the Timer Mounting Bracket

T – Timer’s finish line sensors are visible through these holes

E – Attachment of the Braking Section

Z – Were used to attach the old style braking sections to an additional binding plate.

Unlabeled holes are for joining plates that attach the sections to each other.

Track Sections Assembly:

You bind the lanes together with ‘binding plates’. These are two inches wide and are fitted with female threaded captive nuts (one captive nut for each lane). These plates are affixed from the bottom of the track through the pre-drilled holes labeled ‘B’ on the drawing above. It is easiest to place some of the provided wood shims under the section lane pieces so you can easily slide the binding plate under the section. Secure the binding plate with the 1/4-20 x 1/2” button head screws, using the provided hex key. When assembling any part of this track please start all screws before tightening any. You will have a binding plate to attach to each end of a section. This is the first and last time you will have to do this part of the assembly, so take your time and align all the ends as best you can (use of a Framing Square is recommended).

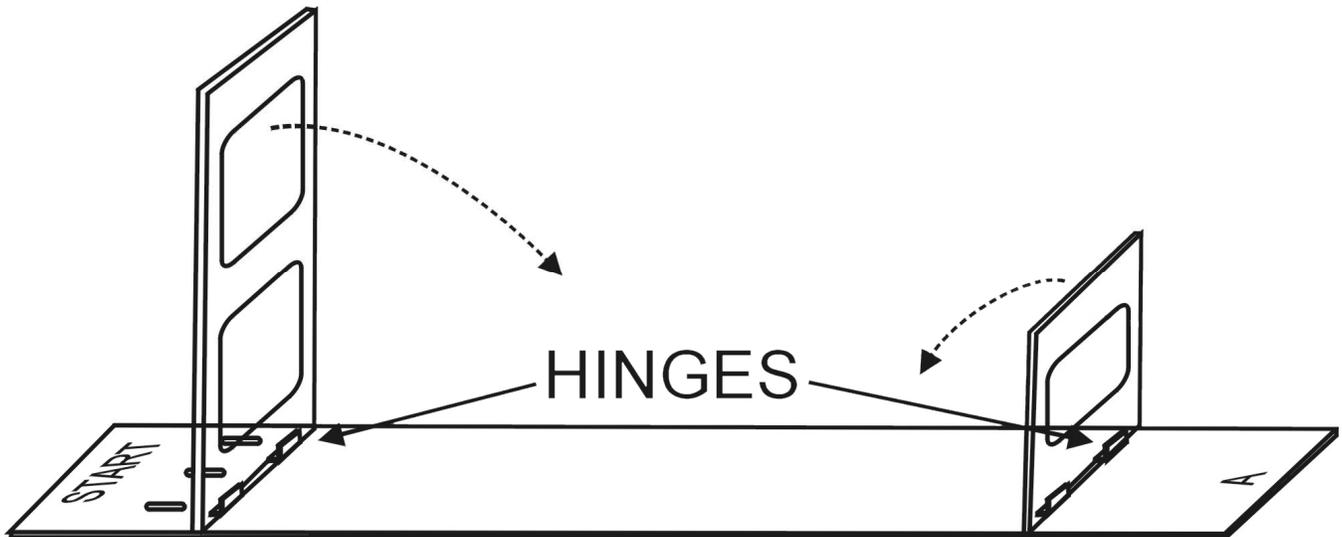
Joining Plate Assembly:

On 4 and 6 lane tracks the 12” joining plates must first be bolted together using the #8 screws and nuts. Start all screws before tightening.

Leg Assembly:

Prior to attaching the long and short hinged legs it is necessary on 4 and 6 lane tracks to join together the two long legs and the two short legs. Use the #8-32 x 1/2" screws and nuts (3 for the long leg, 2 for the short leg) for that.

Hold the Start section on its side. Attach the long leg to the set of holes labeled 'H' which are adjacent to the slots. The long legs fold down as shown below. Use the 1/4-20 x 1/2" button head screws and nuts. The screws should be inserted from the top of the track. Attach the short leg to the 'H' holes at the other end of this section. The short legs fold as shown below.



Start Gate Assembly:

Refer to the Start Gate assembly instructions.

Braking Section Assembly:

Refer to the Braking Section assembly instructions.

Timer Mount Bracket Installation:

If using a timer, attach the timer mount bracket to your timer. For tracks of 3 or more lanes, the bracket will have more captive nuts on the side that will be closest to the end of the track. Line up the lane sensors in the bottom of the timer unit with the center set of holes in the timer mount bracket.

If you are not using a timer, you can attach the timer mount bracket under the Finish section using 1/4-20 x 1/2" button head screws on holes labeled 'M' in the diagram shown earlier.

Track Setup:

Setting up the track for a race only requires the use of the provided 5/32" hex key. Do not use power screwdrivers or drills to tighten the button head screws, as they can strip out the heads of the screws.

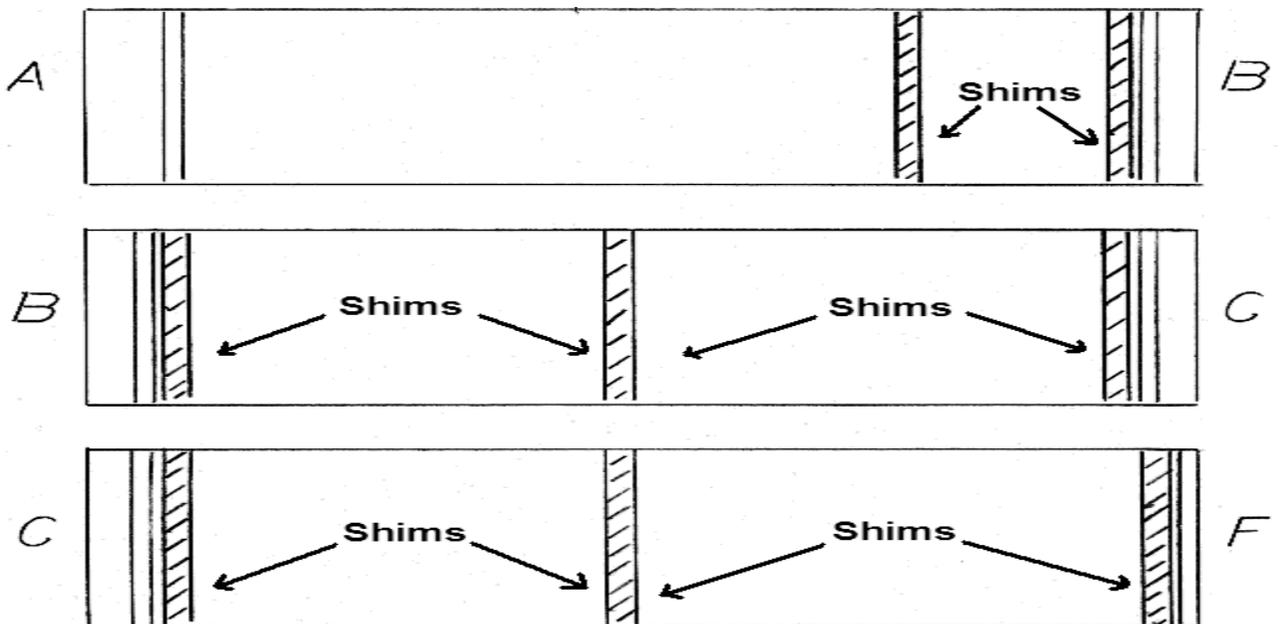
1. Lay the Start section on the floor, racing surface up. Slide the 12" joining plate under the 'A' end of that section. The flanges of this joining plate run parallel to the length of the track. Start the 1/4-20 x 1/2" button head screws into the joining plate but do not tighten them just yet. Set the 'A' end of the Second section onto the joining plate, abutting it to the Start section. Start all screws but do not tighten them just yet. Starting with the first lane, make sure that the lane center lines are perfectly in line with each other and the lane pieces are tightly abutted together. If needed, you can loosen the screw for the closest binding plate on the Second section to aid with alignment. Tighten the screws for that lane. Repeat for all other lanes.
2. Put the first two sections on their side and unfold the legs of the Start section. Attach one of the leg cross brace pieces to the track legs. The 'weight rack' hole should be positioned closer to the short leg. See the diagram below. Affix with #8-32 x 1/2" thumb screws (2 at each end). Thread those into the captive nuts pressed into the flanges of the long and short legs.
3. Have someone help you flip these two sections upright.
4. Attach the other leg brace to the hinged legs with thumb screws. Again, the 'weight rack' hole should be positioned closer to the short leg.



5. Thread the PVC weight rod through one leg brace - through two ten pound weights - then out the other side. This gives the track its required curve. You will need to purchase the ten pound weights from a local store.
6. Slide a 4" joining plate under the 'B' end of the Second section. Start the 1/4-20 x 1/2" button head screws, through the top of the track and into the joining plate. Do not tighten them just yet. Set the 'B' end of the Third section onto the joining plate, abutting it to the Second section. Start the remaining joining plate screws. Starting with the first lane, make sure that the lane center lines are perfectly in line with each other and the lane pieces are tightly abutted together. If needed, you can loosen the

screw for the closest binding plate on the Third section to aid with alignment. Tighten the screws for that lane. Repeat for all other lanes.

7. If you have extra Third sections (tracks longer than 32 ft), repeat Step D for joining those sections to the track, lining up the 'B' end on the additional section to the end of the last attached track section.
8. Slide a 4" joining plate under the 'C' end of the last section you attached. Start the 1/4-20 x 1/2" button head screws, through the top of the track and into the joining plate. Do not tighten them just yet. Set the 'C' end of the Finish section onto the joining plate, abutting it to the last section. Start the remaining joining plate screws. Starting with the first lane, make sure that the lane center lines are perfectly in line with each other and the lane pieces are tightly abutted together. If needed, you can loosen the screw for the closest binding plate on the Finish section to aid with alignment. Tighten the screws for that lane. Repeat for all other lanes.
9. If using a timer, lift up the end of the Finish section and slide the end of the section through the middle of the timer unit. For tracks of 3 or more lanes, the timer mount bracket will have more captive nuts on the side that will be closest to the end of the track. Use 1/4-20 x 1/2" button head screws to secure the timer mount bracket to the 'M' holes. The lane sensors of the timer unit will line up under the 'T' holes for each lane.
10. Attach the ends of the Braking section to the 'E' holes, going through the Timer Mount Bracket, using 1/4-20 x 1/2" button head screws.
11. Slide wood shims under the track sections according to the following diagram. These space the track off of the floor and protect the floor from the protruding hardware of the joining plates. If you wish, you can put these under the track as you attach each individual section. Also, place wood shims under each end of the Braking section.



12. Attach the Start Gate to the 'G' holes, using two 1/4-20 x 1/2" button head screws.
This will attach to the outer two lanes only.
13. Attach the timer switch bracket or start sensor system, if applicable.
14. Finish wiring up your timer, if applicable.
15. Test cars down the track.

Track Teardown:

After your race, tear down the track in following manner.

1. Remove the Braking section.
2. Remove the timer, if one is being used. Leave the mounting plate attached to your timer, if possible.
3. Remove the button head screws from the uphill side of the 4" joining plates. You can leave the 4" joining plates attached to the end of a section, which makes setup the next time around easier and faster.
4. Remove the Start Gate.
5. Remove the timer start switch or sensor system, if applicable.
6. Remove one of the leg braces from the Start section.
7. With a helper, lay the first two sections down on their sides.
8. Remove the other leg brace.
9. Fold the track legs in and lay those sections down on the floor.
10. Remove all button head screws from the 12" joining plate.
11. To protect your investment, it is recommended that you store the track in a crate.
Crate plans are available at <http://microwizard.com>.
12. Stack each section, using 3 wood shims between each section to protect the track's running surface.
13. Store all hardware and the hex key in the provided box.