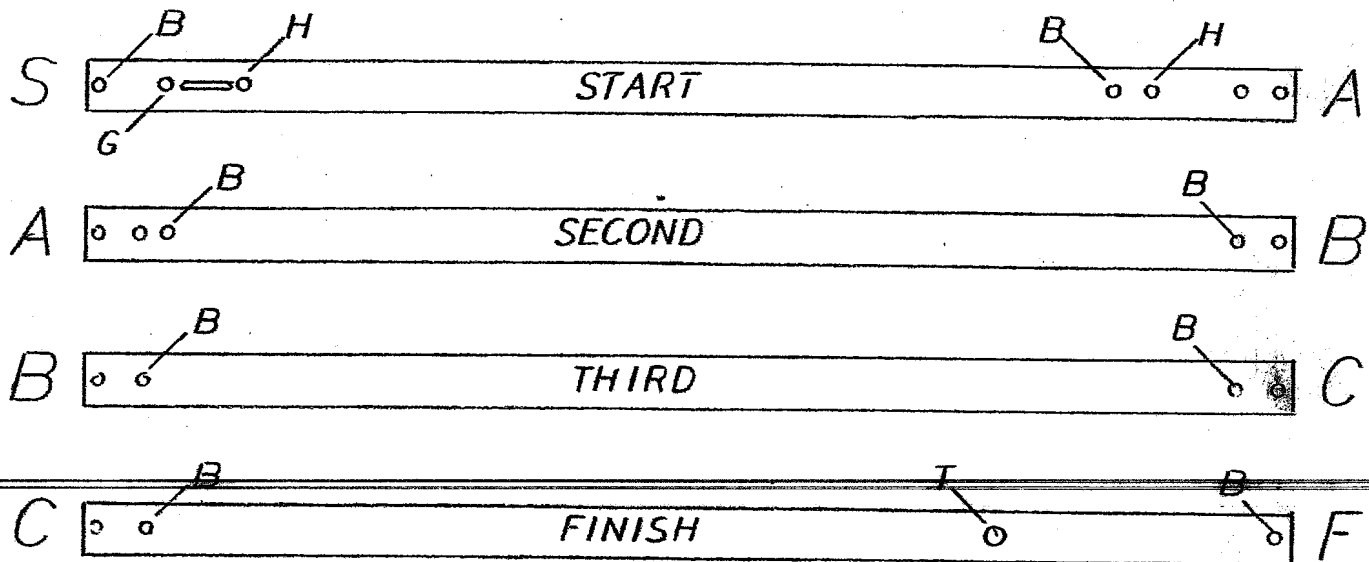


Congratulations on your purchase of a new Piantedosi Pinewood Derby Track. Great attention has been paid to design and detail to generate a 'no fuss' and easy to assemble track that will provide decades of enjoyment. Please take a moment to read through these simple instructions to familiarize yourself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

These instructions apply to both the 'Freedom' aluminum and 'Classic' wood series tracks. The primary distinction is that the Classic series are produced as full width tracks and do not require binding plates. The lane sections for the Classic tracks also do not have the 'B' holes indicated in the following drawings.

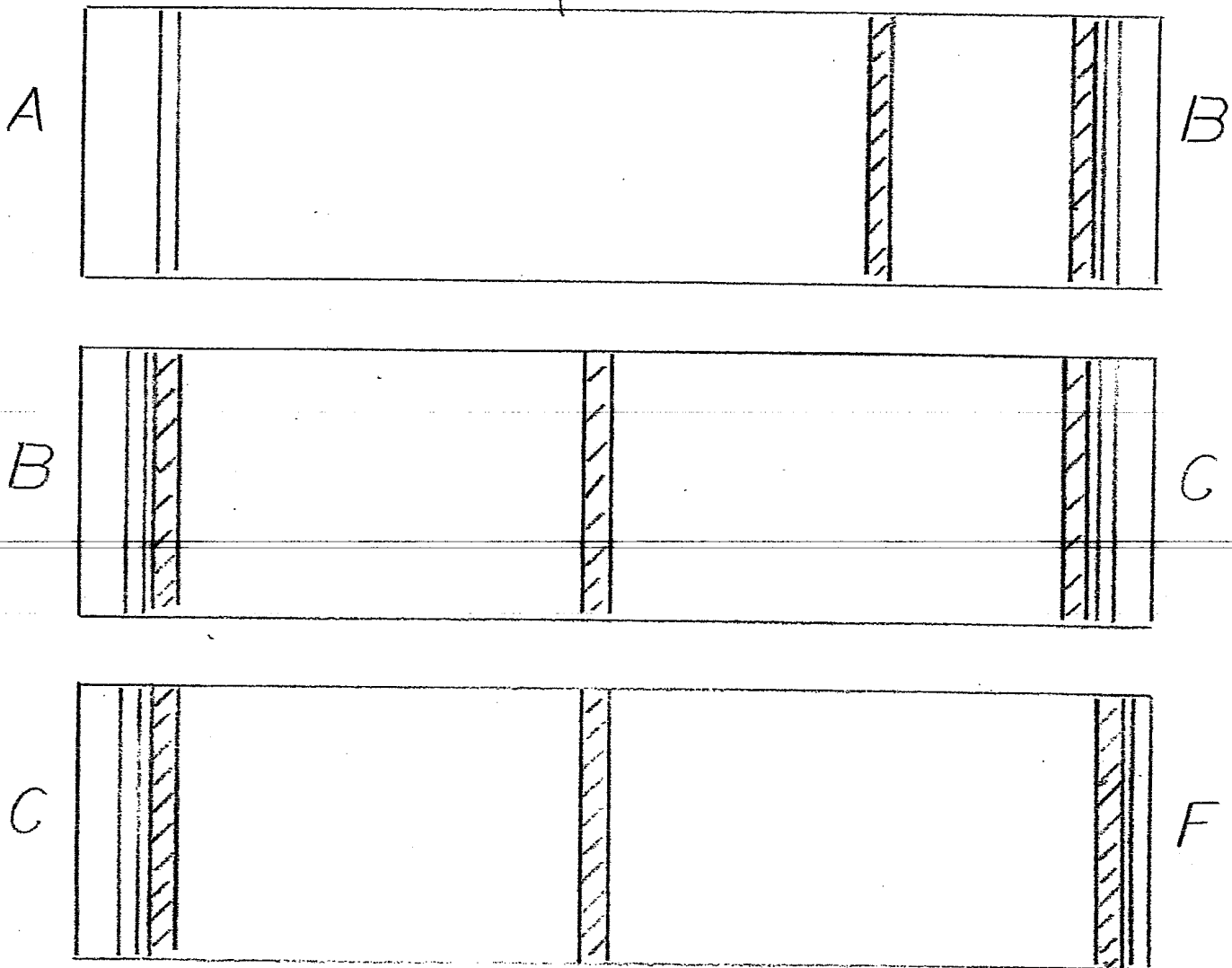


There are four different types of lane sections as indicated in the above drawing. Each section has its own unique hole pattern. Your first job with the 'Freedom' series is to nest together the sections to construct the specific width track you ordered. Begin by sorting the sections face up and aligned in the same direction. The bottoms of the tracks 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.

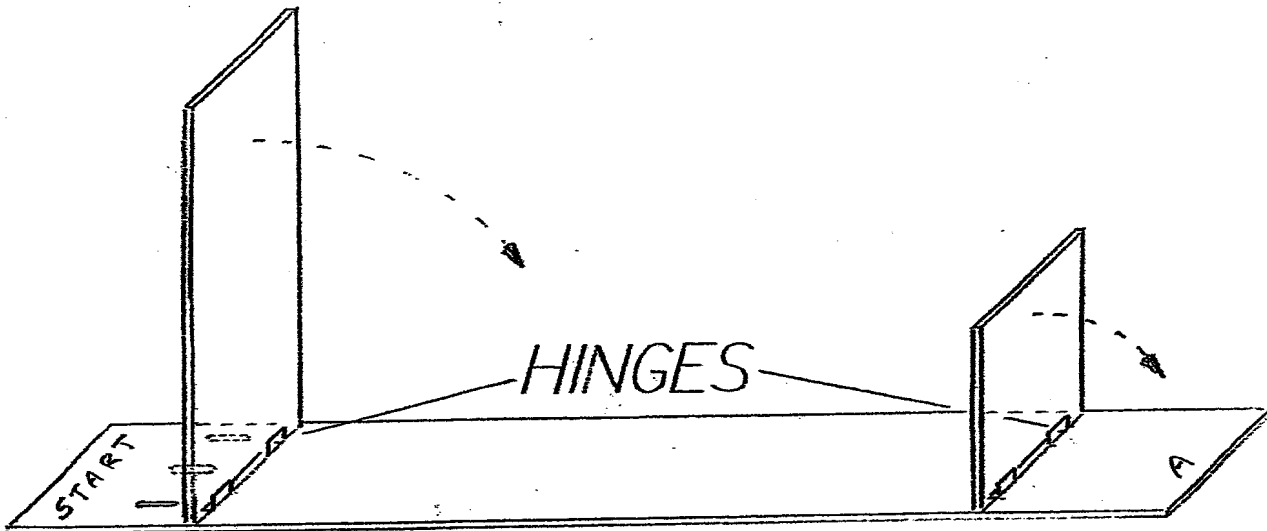
You bind the lanes together with 'binding plates'. These are two inches wide and are fitted with female threaded captive nuts (one captive nut for each lane). These plates are affixed from the bottom of the track through the pre-drilled holes labeled 'B' on the drawing above. Attach them with the  $\frac{1}{4}$ -20 x  $\frac{1}{2}$ " button head screws using the hex key in your kit. 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 assembly so take your time and align all the ends as best

With the track sections upside down you may want to affix the wooden shims to the bottom of the second, third, and finish section. These shims space the track off of the floor and the protruding hardware of the joining plates. You can place them loosely under the track but I find Scotch brand double-coated tape (linerless) will hold them in place quite well and make assembly easier. On Classic series tracks you may wish to wood screw the shims in place using short flat head screws. Be sure to screw into a section that is covered by a car guide. The sections will slide along the floor without marring. In addition the shims left on the track during storage will protect the track sections when stacked on top of each other. Refer to the following diagram for proper shim placement.

Please note that on longer tracks you are supplied with additional B/C sections.



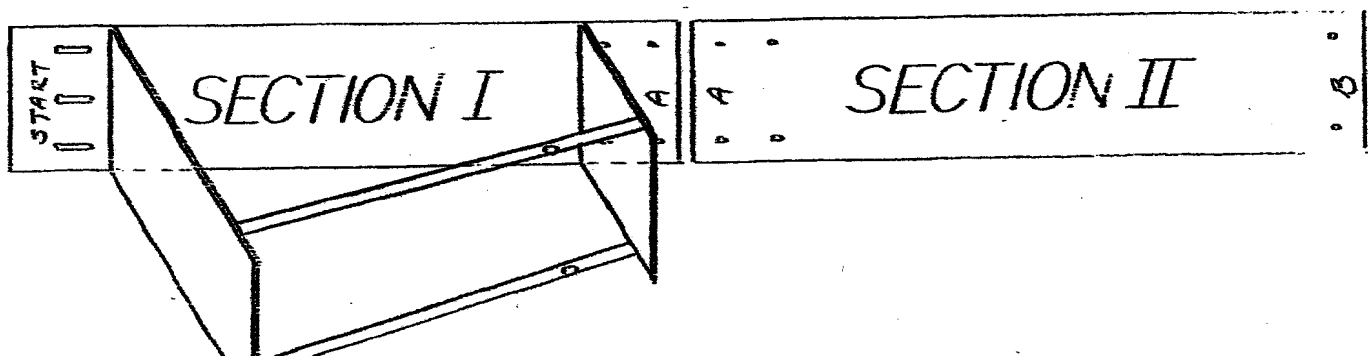
Prior to attaching the 42" and 12" hinged legs it is necessary on 4 and 6 lane tracks to join together the two 42" legs and the two 12" legs. Use the #8-32 screws and nuts (3 for the 42" leg, 2 for the 12" leg). Turn the 8' Starting section upside down. Attach the 42" leg to the hole next to the slots labeled 'H'. The flange of the hinge should be closer to the slots. 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 12" leg in a similar fashion at the other end of this section. Both legs fold down flat and are left in place during storage. See the following diagram.



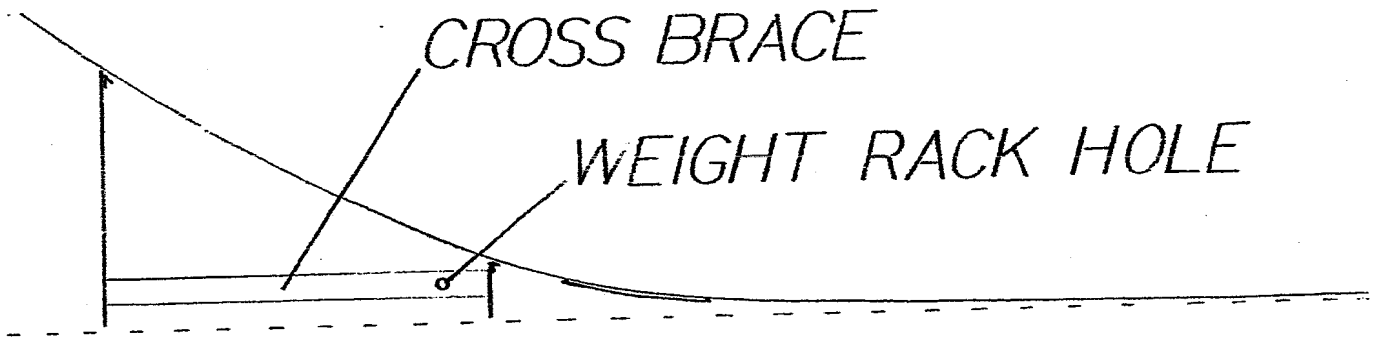
Attach the two 63" long brace pieces to the hinge legs. You may want to ask for an extra set of hands here. The 'weight rack' hole should be positioned closer to the 12" leg. Affix with #8-32 x 1/2" screws (2 at each end). Thread into the captive nuts pressed into the flanges of the 42" and 12" legs.

Join the starting section to the second section. This is cumbersome and best accomplished while the pieces are on their sides while on a flat floor. See the following diagram:

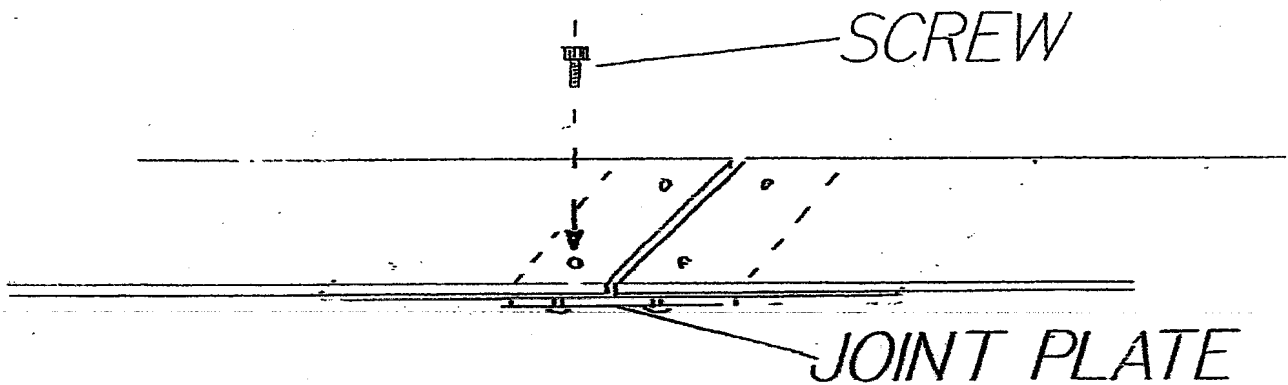
Bolt through the track into the flanged joining plate. On 4 and 6 lane tracks the flanged joining plates must first be bolted together using the #8 screws and nuts. Again - start all screws before tightening. Align the seam and center guides and start snugging down the screws. Check the alignment and continue tightening. Once all screws are tight you may want to ask for assistance in turning every thing upright.



At this point you can thread the weight rod through one brace – through two ten pound weights – then out the other side.

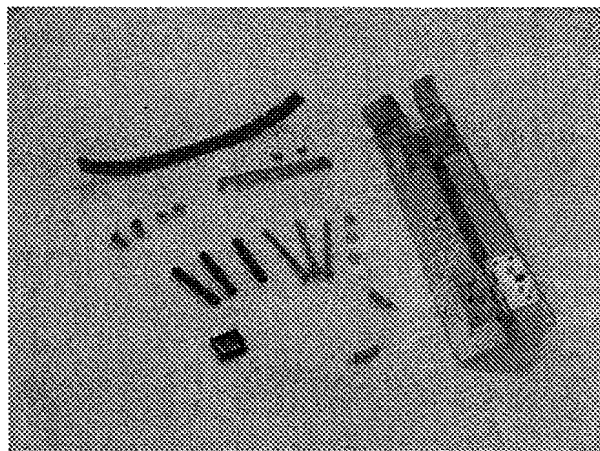


The last two sections are affixed in order using the 4" wide (no flange) joining plates. Start all screws – align the seam and center guides – tighten.

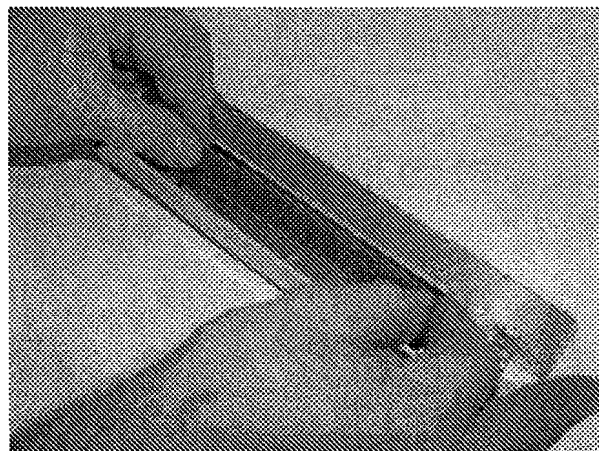


# Starting Gate Assembly and Installation

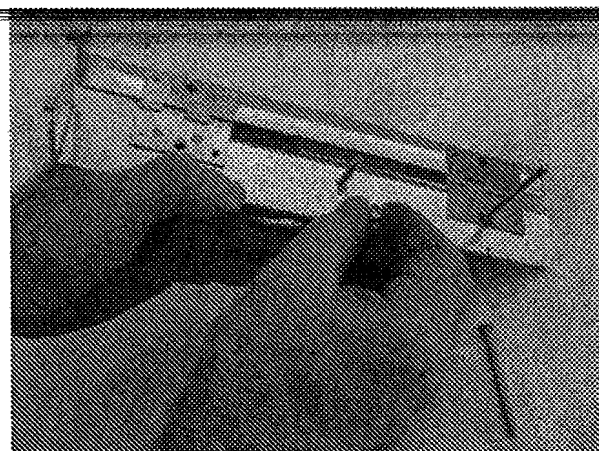
## 1 Unpack Parts



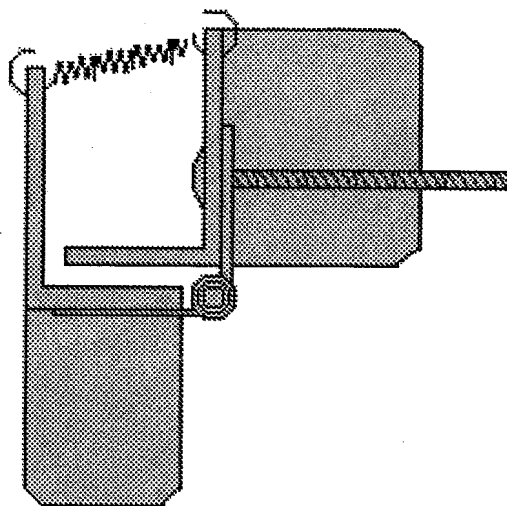
## 2 Apply self adhesive foam pad as pictured to the underside leg of the swinging gate. Clean that surface with a Windex(TM) type product prior to application. This acts as a cushion when the gate springs open.



## 3 Attach the starting pegs. Feed the #10x2" screws from the bottom of the swinging gate and attach the accompanying nuts.



# **IMPORTANT: Start Gate Spring Installation**

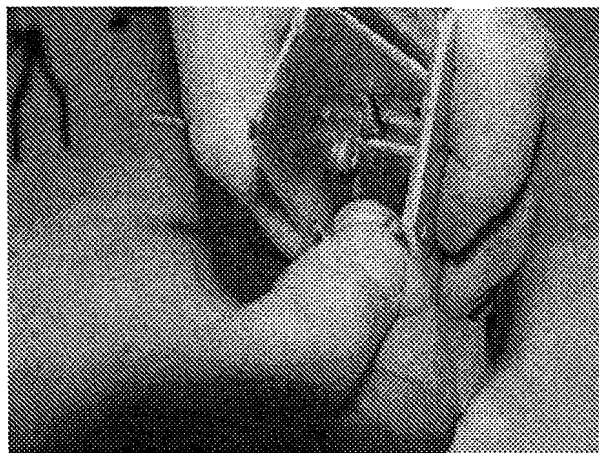


When installing the spring on the starting gate, it is important that the two ends of the spring are threaded through the holes as pictured above. This is a little tricky. After hooking one end, stretch and bend the spring over your finger to help you thread the other end.

## Starting Gate Assembly and Installation (Cont.)

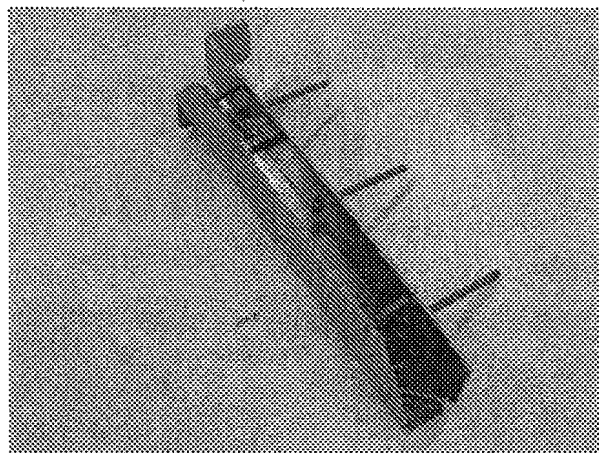
**4**

**With the gate 'folded', attach the two springs to the small holes at either end.**



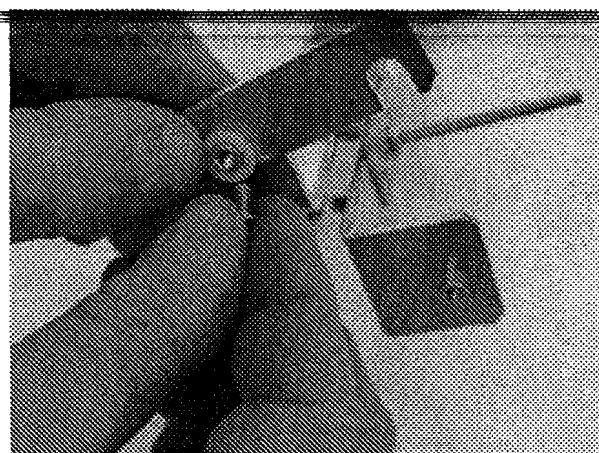
**5**

**This is how the gate should look by this point.**



**6**

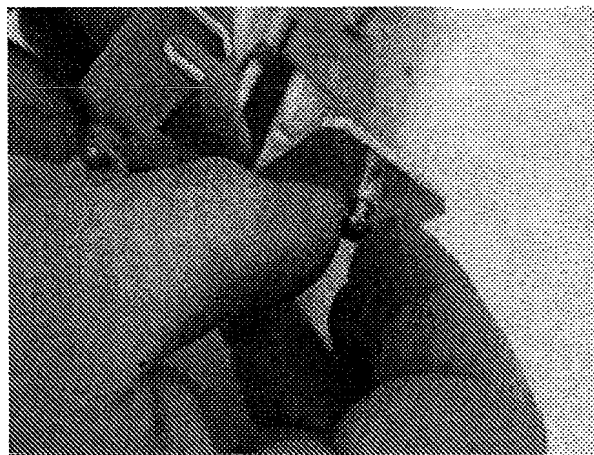
**Next, attach the starting lever, two plastic spacers, and a small #10 screw**



## Starting Gate Assembly and Installation (Cont.)

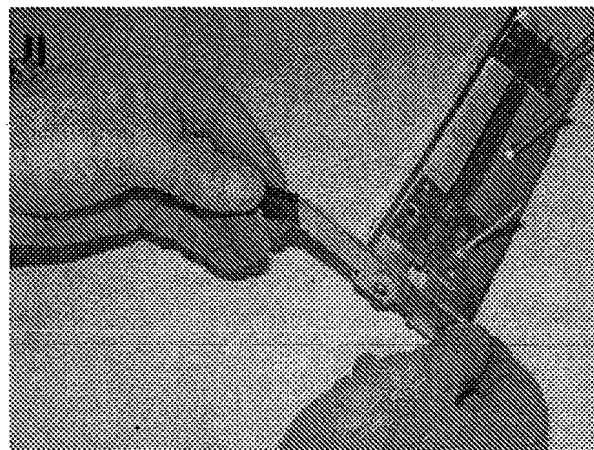
**7**

**Attach a small #10 screw onto the latch catch post.**



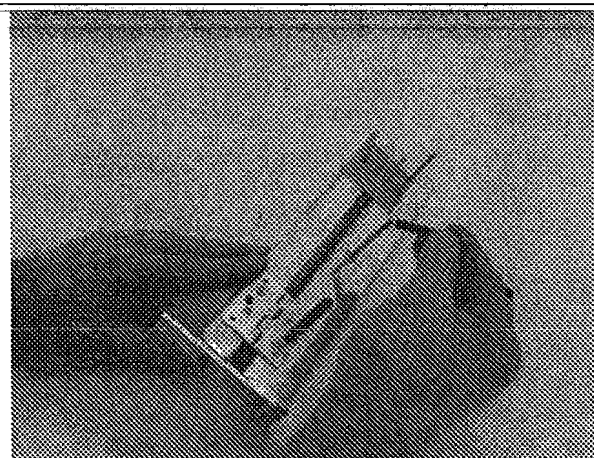
**8**

**Slip the black vinyl cover onto the end of the catch.**



**9**

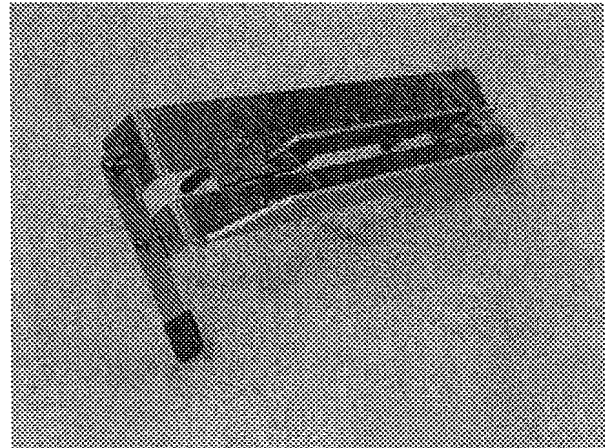
**Slip the black vinyl sleeves over the starting pegs.**



# Starting Gate Assembly and Installation (Cont.)

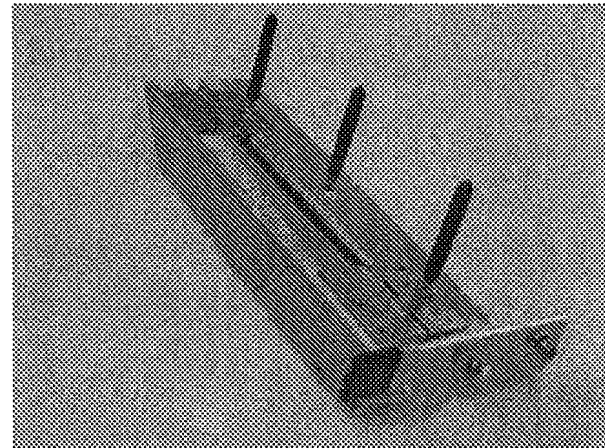
**10**

**Bottom view of assembled gate**



**11**

**Top view of assembled gate**



**12**

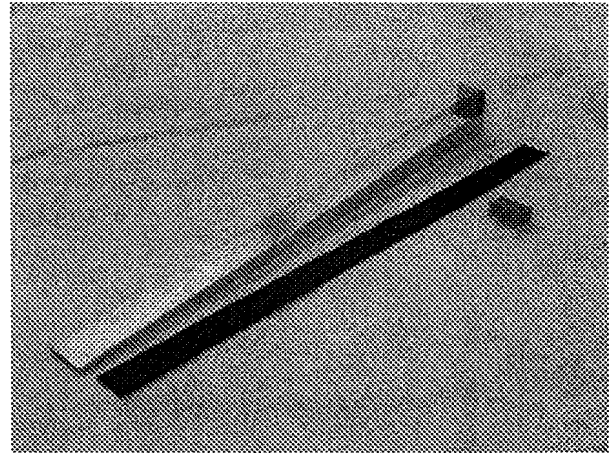
**Attach gate to the track from the bottom. Bolt through the two outside lanes using the provided nuts on the bottom.**



# Braking Ramp Assembly and Installation

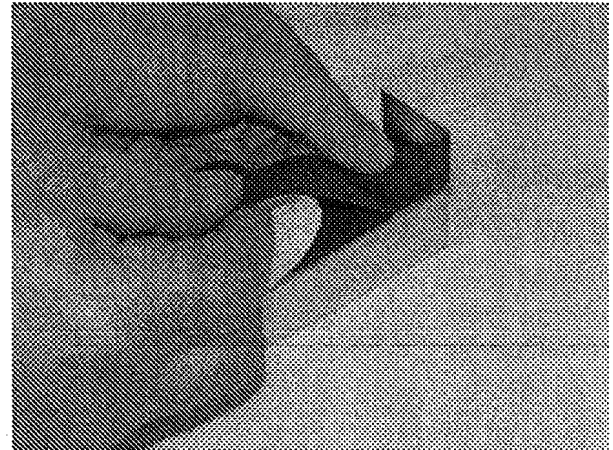
**1**

**Make sure the top surface of the ramp is clean and free of grease. Windex(TM) or a similar product works well.**



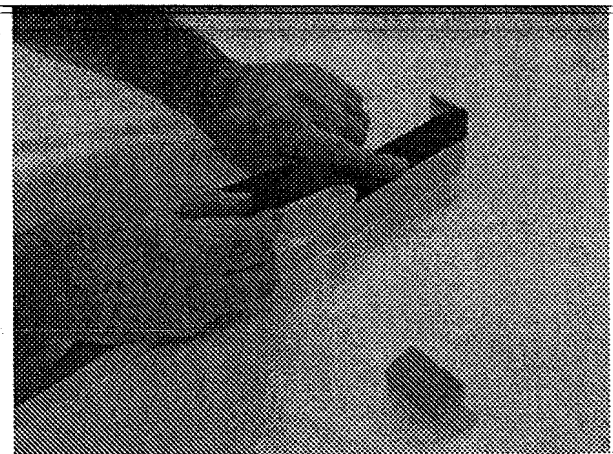
**2**

**Start to peel back the paper liner from the back of the non-skid tape (just an inch or so). Attach the leading edge into the corner.**



**3**

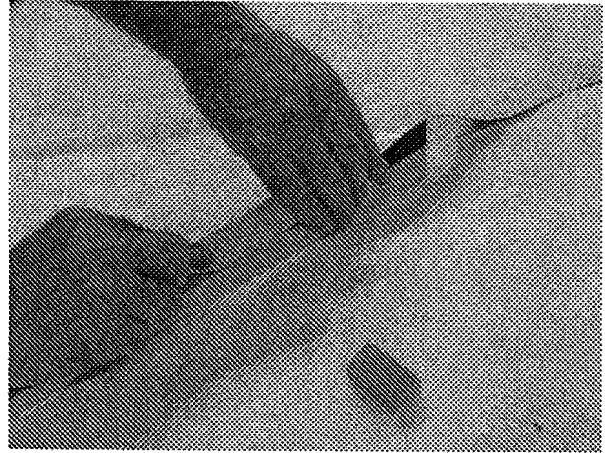
**For the first few inches, draw the paper liner beneath the tape as you press it into place.**



# Braking Ramp Assembly and Installation (Cont.)

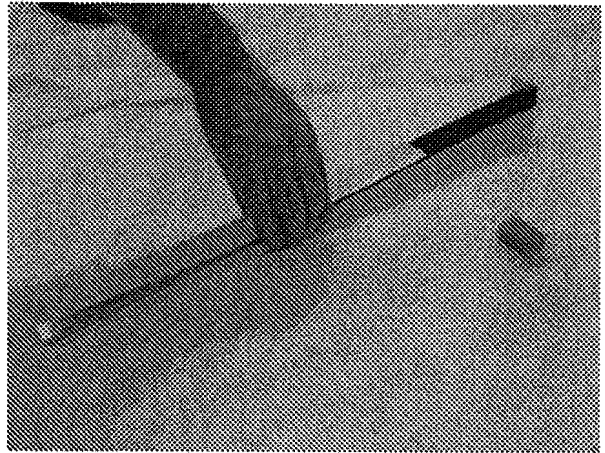
**4**

**Flip the tape over the end of the ramp. Position one hand to guide the tape onto the ramp while pulling on the liner with the other.**



**5**

**Continue to draw the paper liner down the ramp.**



**6**

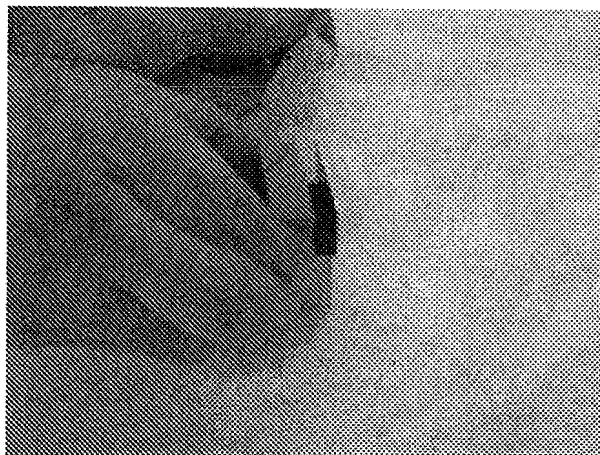
**Smooth out any air pockets or wrinkles.**



## Braking Ramp Assembly and Installation (Cont.)

**7**

**Peel the paper liner from the grey foam pad and affix it to the barrier.**



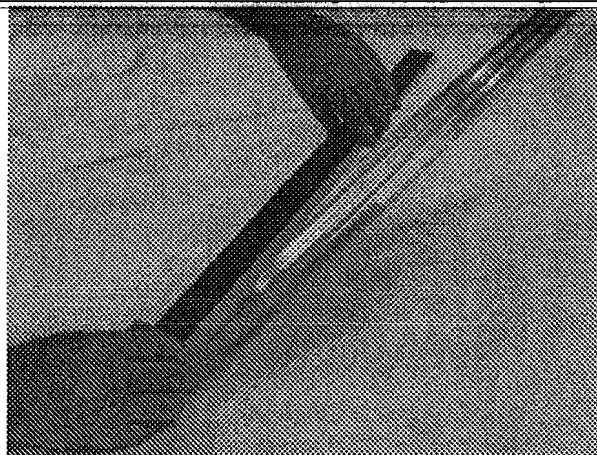
**8**

**Ready to attach.**

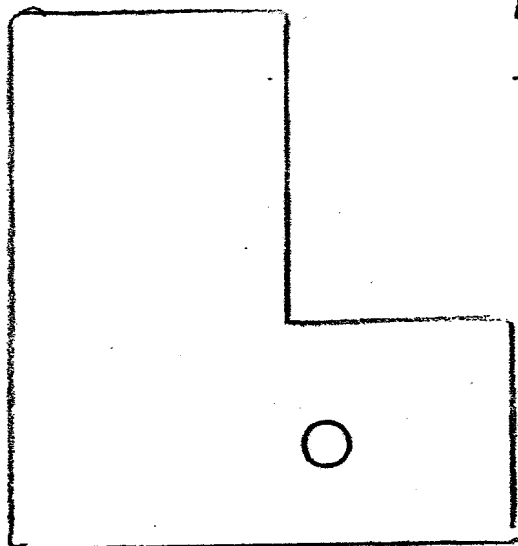


**9**

**Clip to the end of the track. Start at the ramped end and rotate down and snug into place.**



MOUNTING FOR MICRO-WIZARD  
LASER START. INSTEAD OF  
THE 1/4-20 NUTS USED TO  
ATTACH THE HINGE OF THE  
4 1/2" LEG IN THE OUTSIDE  
LANES - SUBSTITUTE A  
PLYWOOD 'L'

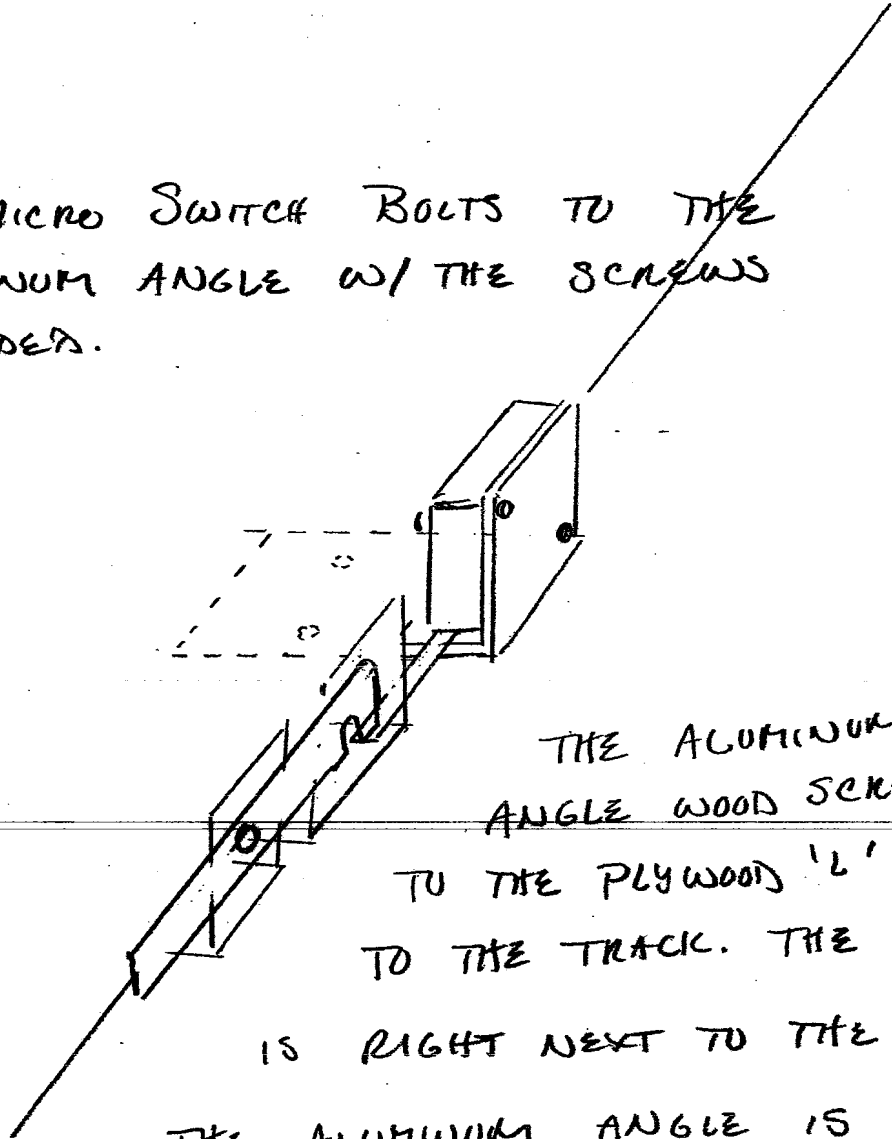


WITH THE  
CAPTIVE  
T-NUT. ON  
THIS IS IN

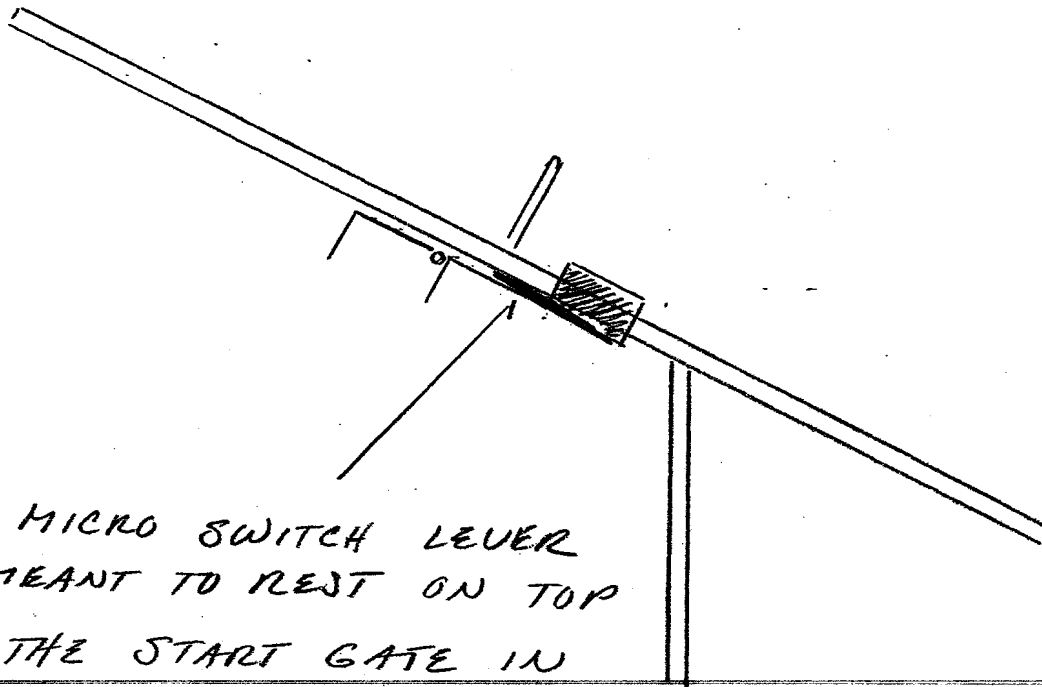
PLACE (BELOW THE  
TRACK SURFACE)  
WOOD SCREW THE  
LASER BRACKETS  
FROM MICRO WIZ  
TO THESE 'L'S.



THE MICRO SWITCH BOLTS TO THE ALUMINUM ANGLE W/ THE SCREWS PROVIDED.



THE ALUMINUM ANGLE WOOD SCREWS TO THE PLYWOOD 'L' ATTACHED TO THE TRACK. THE SWITCH IS RIGHT NEXT TO THE TRACK. THE ALUMINUM ANGLE IS OUTSIDE OR 'OUTBOARD' OF THE SWITCH.



THE MICRO SWITCH LEVER  
IS MEANT TO REST ON TOP  
OF THE START GATE IN  
THE READY POSITION. THE VERTICAL MEMBERS  
AND START LEVER ARE MISSING FROM THIS  
DRAWING TO SHOW THE RELATIVE POSITIONS.