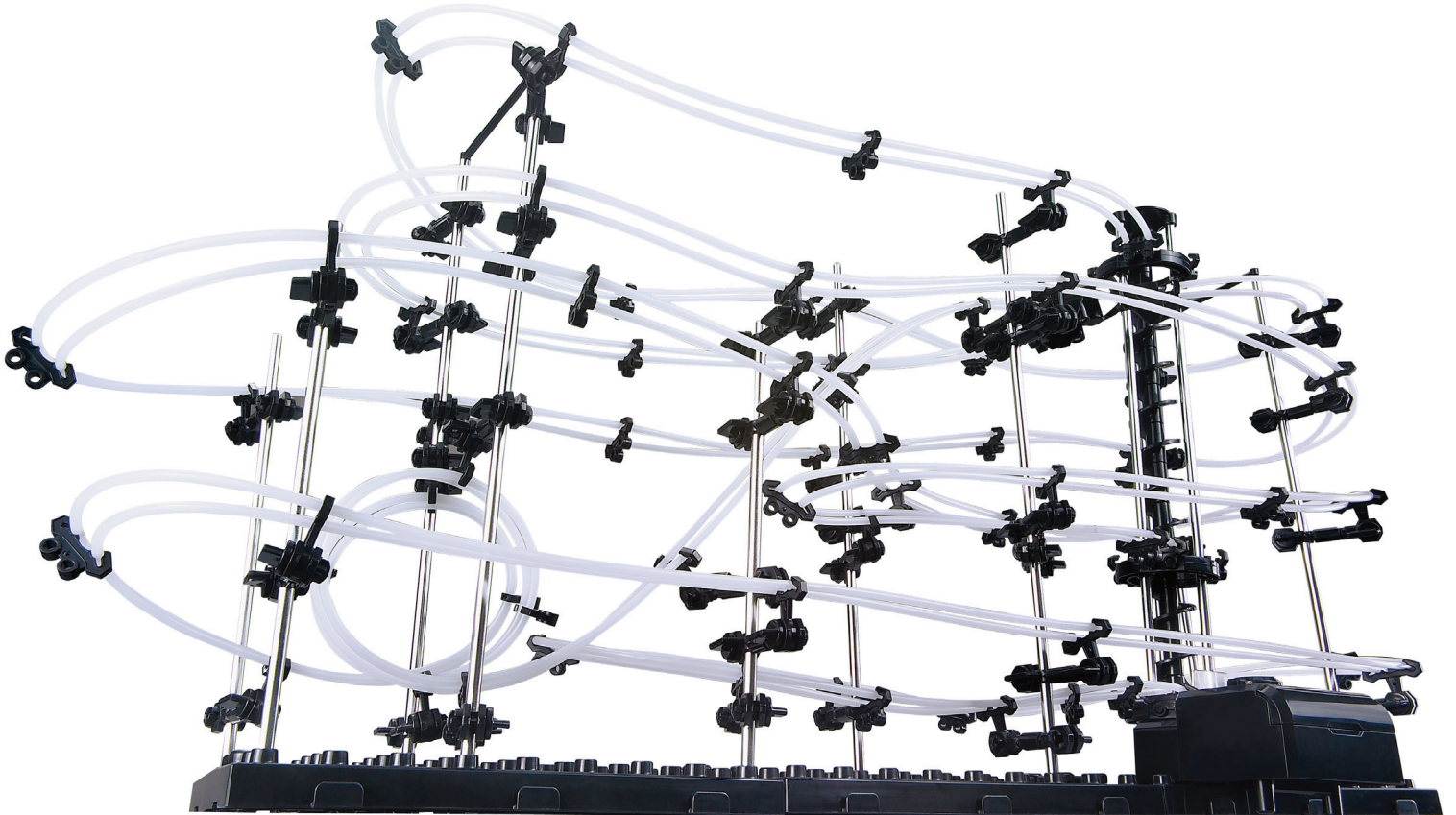




LEVEL 3

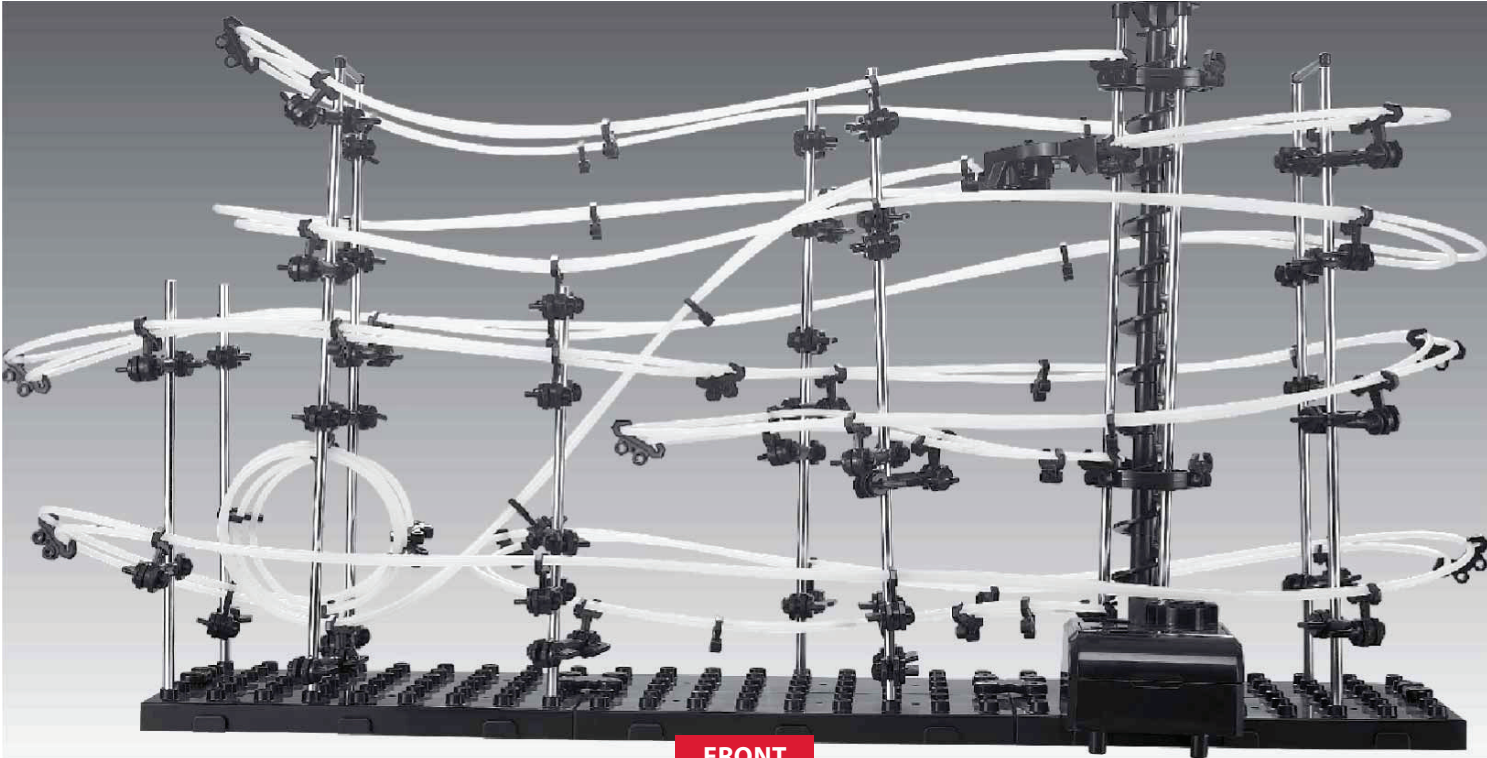


PRODUCT AND CONSUMER WARNING

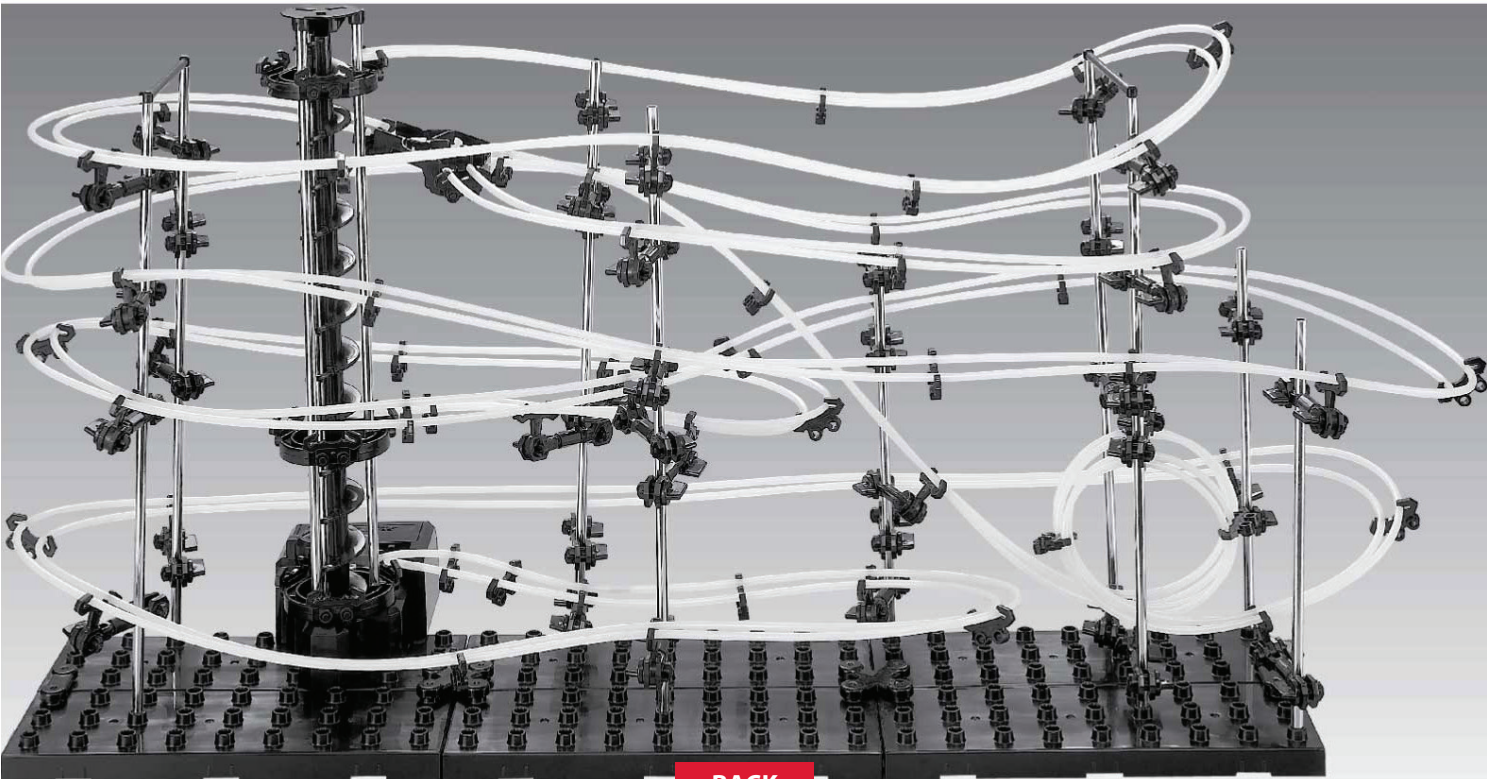
CHOKING HAZARD: This product contains small parts and is not intended for children under 3.

- This product is intended for users 8 years of age and older.
- To avoid choking, keep small parts away from children.
- Use caution—this product contains parts with sharp edges.
- To avoid potential damage to the product, only insert the included marbles into the elevator.

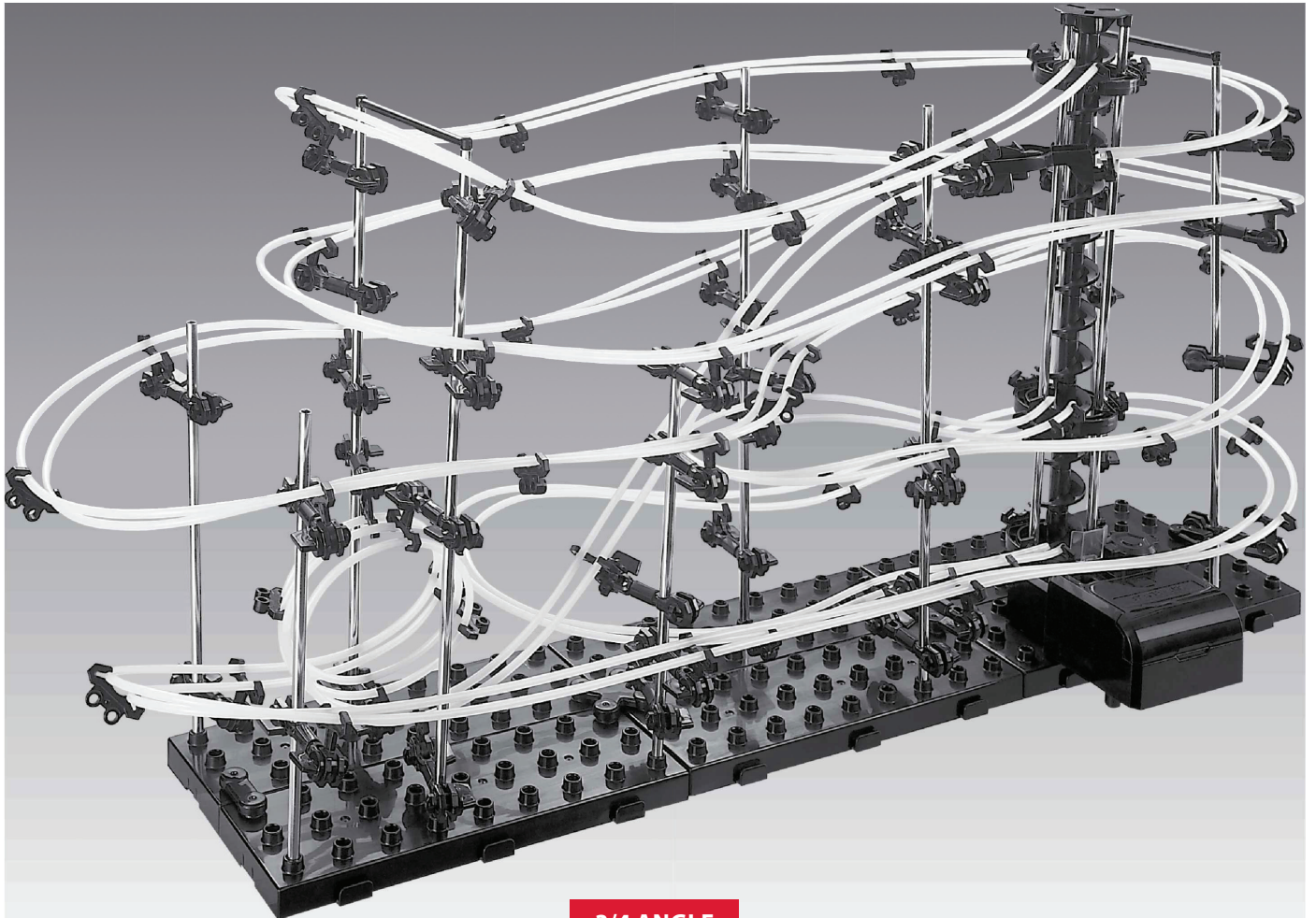
MULTI-VIEW OF FINAL ASSEMBLY



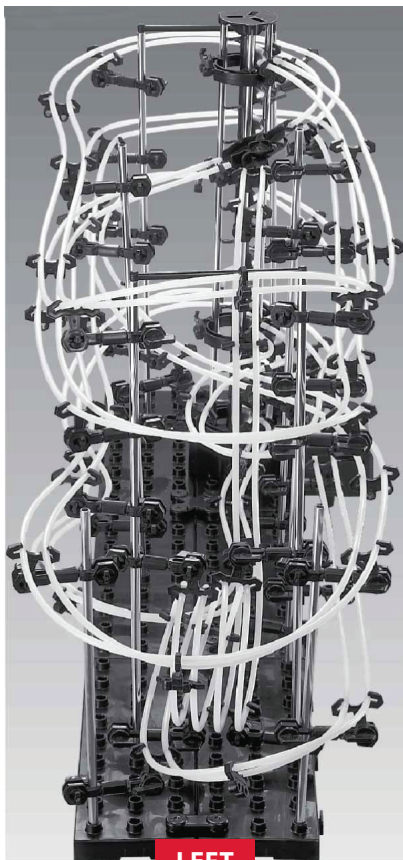
FRONT



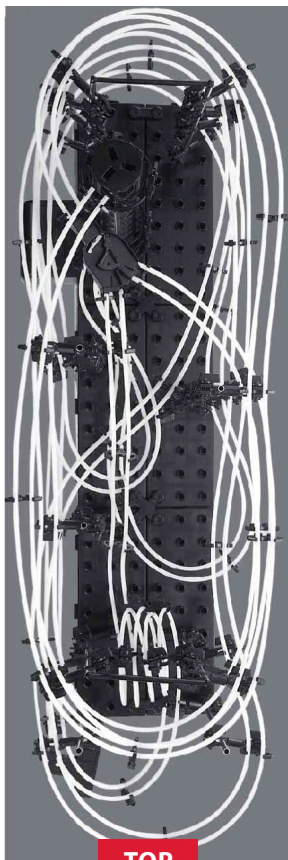
BACK



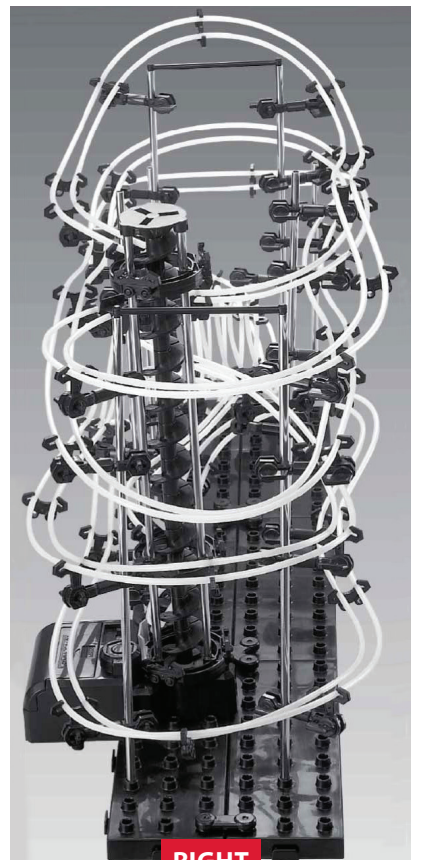
3/4 ANGLE



LEFT



TOP

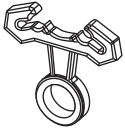


RIGHT

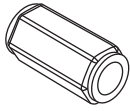
PARTS INCLUDED

Keep parts together to avoid misplacing them.

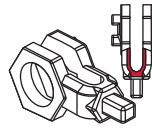
ARM COMPONENTS



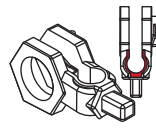
Arm Clip
x40



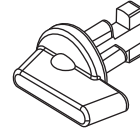
Arm Sheath
x40



Arm Holder A
x40

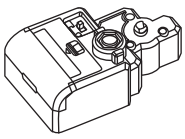


Arm Holder B
x40



Arm Lock
x80

ELEVATOR COMPONENTS



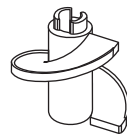
Power Box
x1



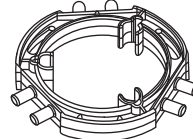
Shaft (300mm)
x10



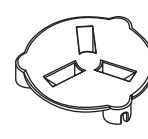
Shaft (200mm)
x3



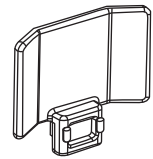
Elevator Helix
x12



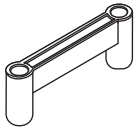
Elevator Ring
x3



Elevator Cover
x1



Elevator Guard
x2



Power Box Stand
x1

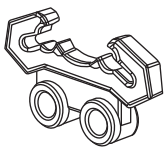


Shaft Connector (90mm)
x1

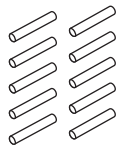


Shaft Connector (50mm)
x1

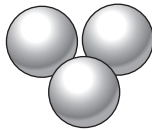
RAIL COMPONENTS



Rail Clip
x45



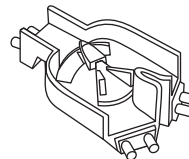
Rail Coupling
x10



Marble
x3

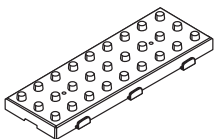


Rail
16000 mm

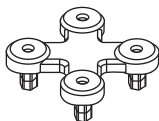


Rail Splitter
x1

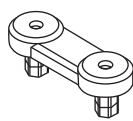
BASE COMPONENTS



Base
x6



Base Holder A
x2



Base Holder B
x2

REQUIRED TOOLS & ITEMS (NOT INCLUDED)

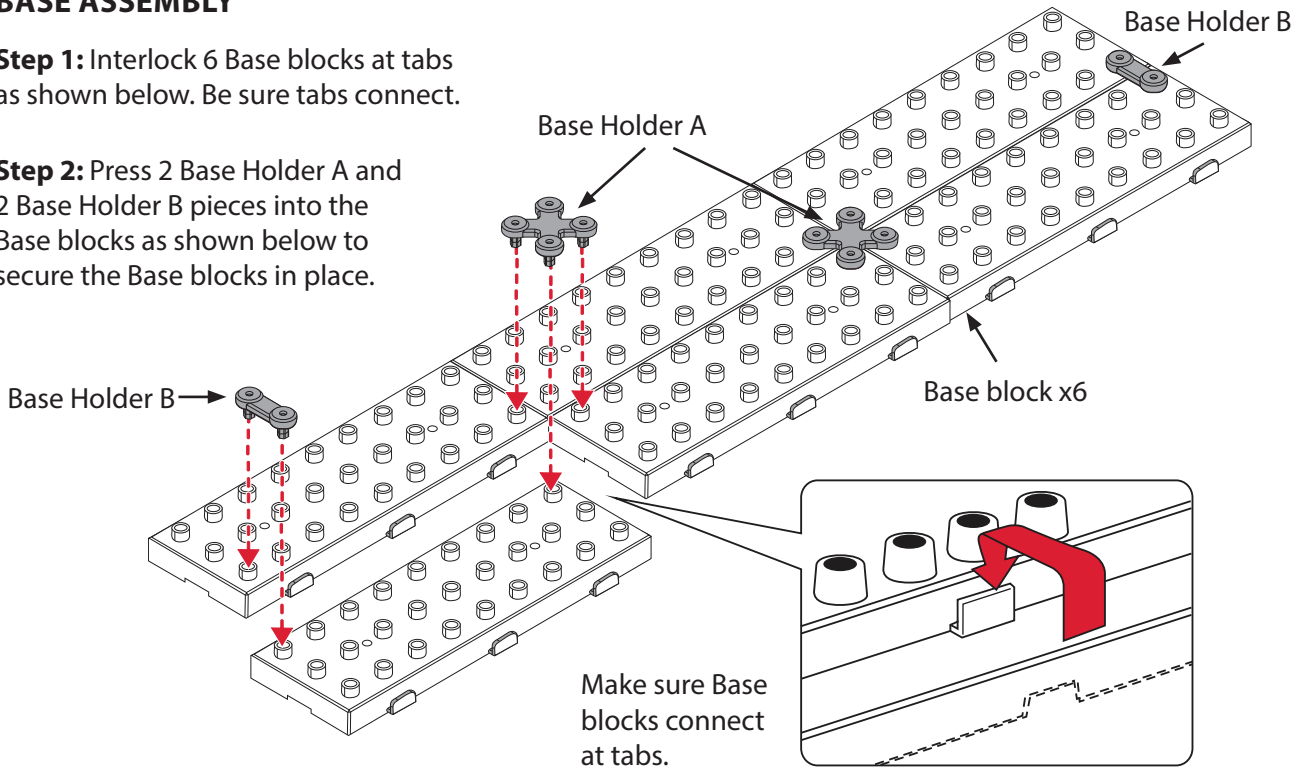
- Wire Cutters or Utility Scissors
- Pen or Marker
- 3 AA Batteries (newer models) or 1 C Battery
- Ruler (in centimeters)

1 PREPARE THE COASTER COMPONENTS

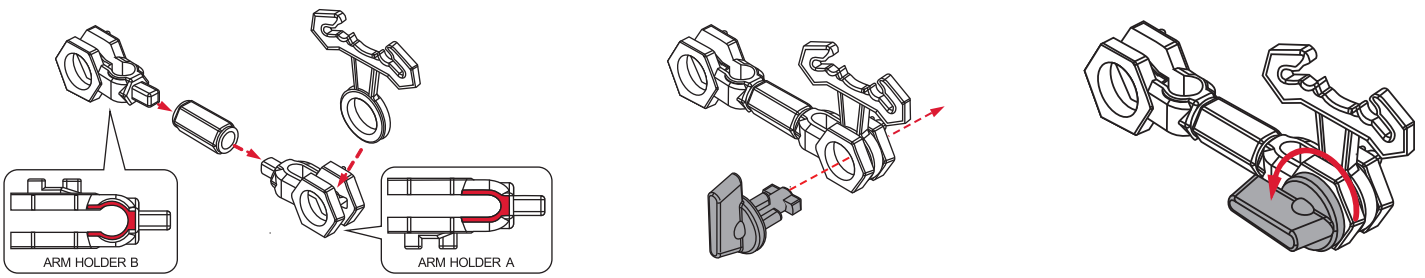
A BASE ASSEMBLY

Step 1: Interlock 6 Base blocks at tabs as shown below. Be sure tabs connect.

Step 2: Press 2 Base Holder A and 2 Base Holder B pieces into the Base blocks as shown below to secure the Base blocks in place.



B ARMS (QTY: 40)



Step 1: Attach one Arm Holder A and one Arm Holder B with one Arm Sheath. Insert one Arm Clip into Arm Holder A.

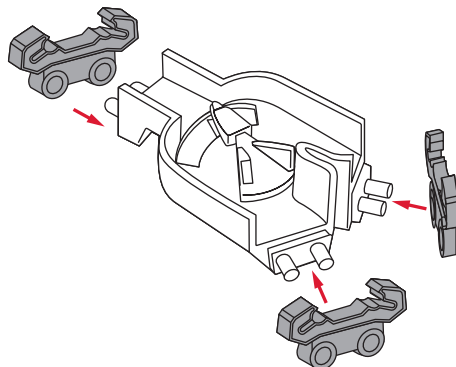
Step 2: Insert Arm Lock through Arm Holder A and Arm Clip.

Step 3: Turn the Arm Lock counter-clockwise to secure the Arm Clip in place.



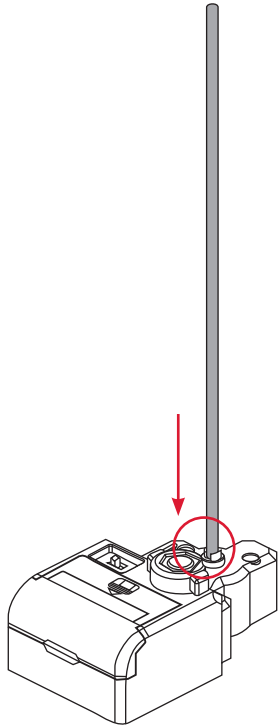
To avoid damaging parts, do not move or adjust the Rail Clip while locked in the arm. To move the Rail Clip, release Arm Lock by turning clockwise, position Rail Clip as desired, then secure Arm Lock again.

C RAIL SPLITTER

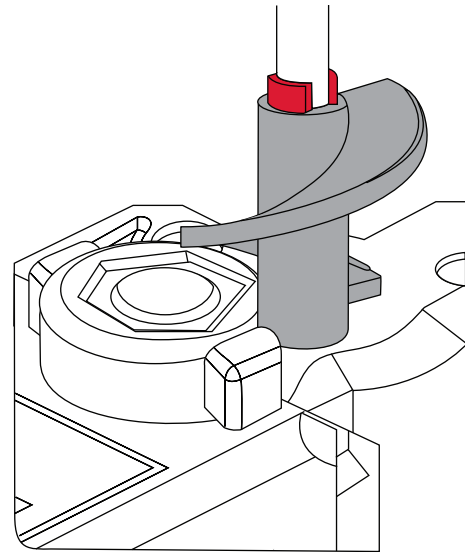


Prepare Rail Splitter: Attach one Rail Clip to each of the 3 Rail Splitter posts (3 total Rail Clips).

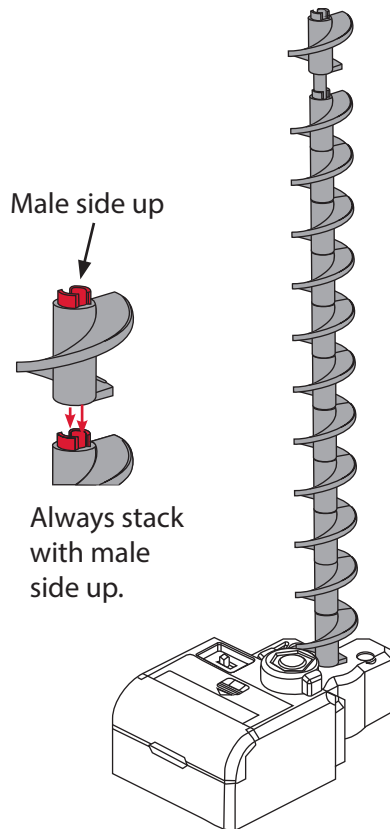
D ELEVATOR ASSEMBLY



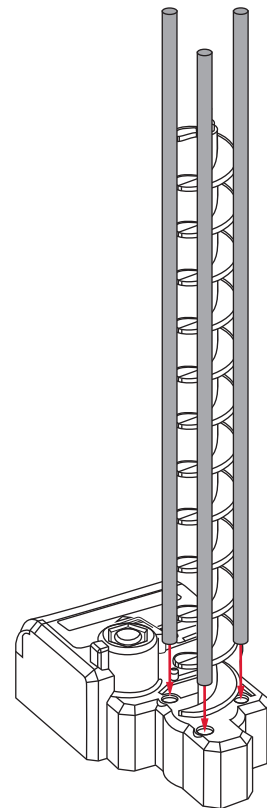
Step 1: Place a 300 mm shaft in the white hole on the Power Box.



Step 2: Install the first Elevator Helix piece male side up and rotate it until it slides in place and engages with driver at the base of Power Box.

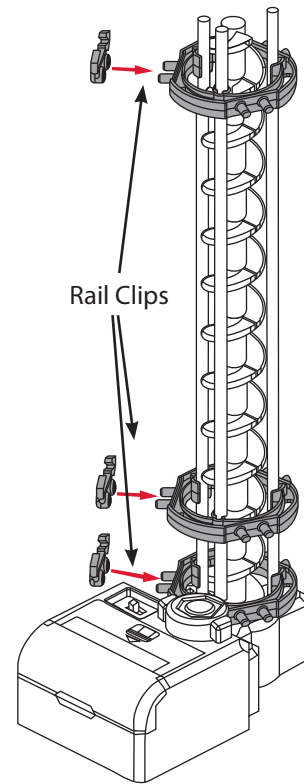
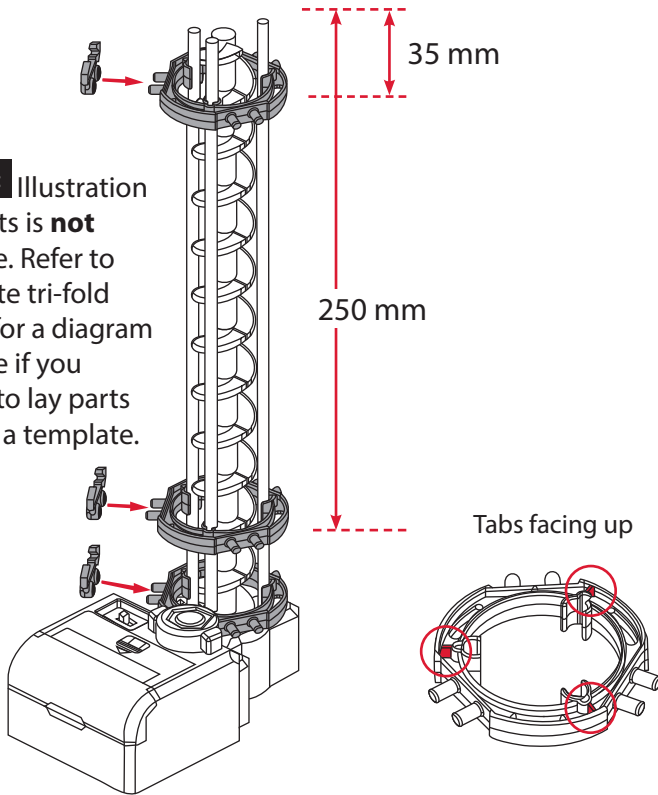


Step 3: Connect 12 Elevator Helix pieces together with the male part facing up to fill the shaft. Rotate each piece so the track lines up with the piece below it.



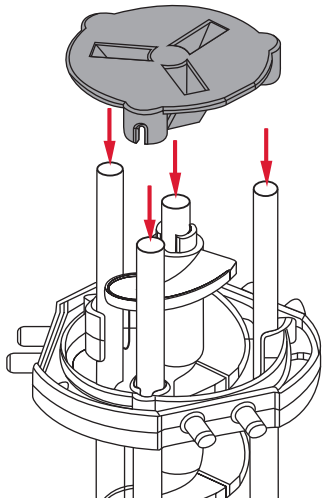
Step 4: Once the corkscrew is built, attach three 300 mm support shafts to the Power Box in the 3 holes shown.

NOTE: Illustration of shafts is **not** to scale. Refer to separate tri-fold insert for a diagram to scale if you prefer to lay parts out on a template.

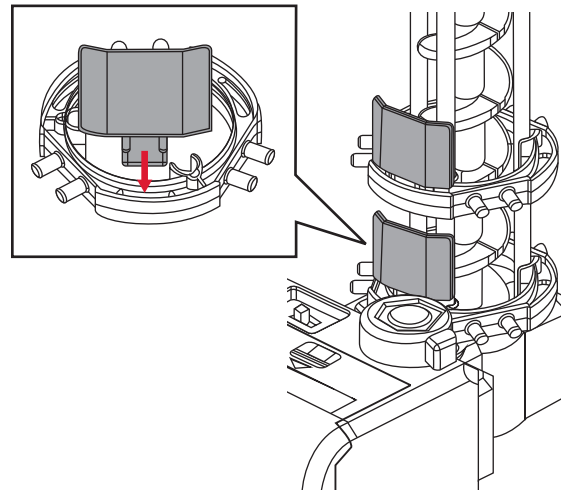


Step 6: Install Elevator Rings with tabs facing up, as shown in red above. Slide each ring from the top down. Place 1 ring flush with the bottom. Place the other 2 at measurements shown measuring from top of the shaft to the center of the ring.

Step 7: Connect one Rail Clip to each Elevator Ring on the side shown above.



Step 8: Place the Elevator Cover onto the top of the elevator assembly.

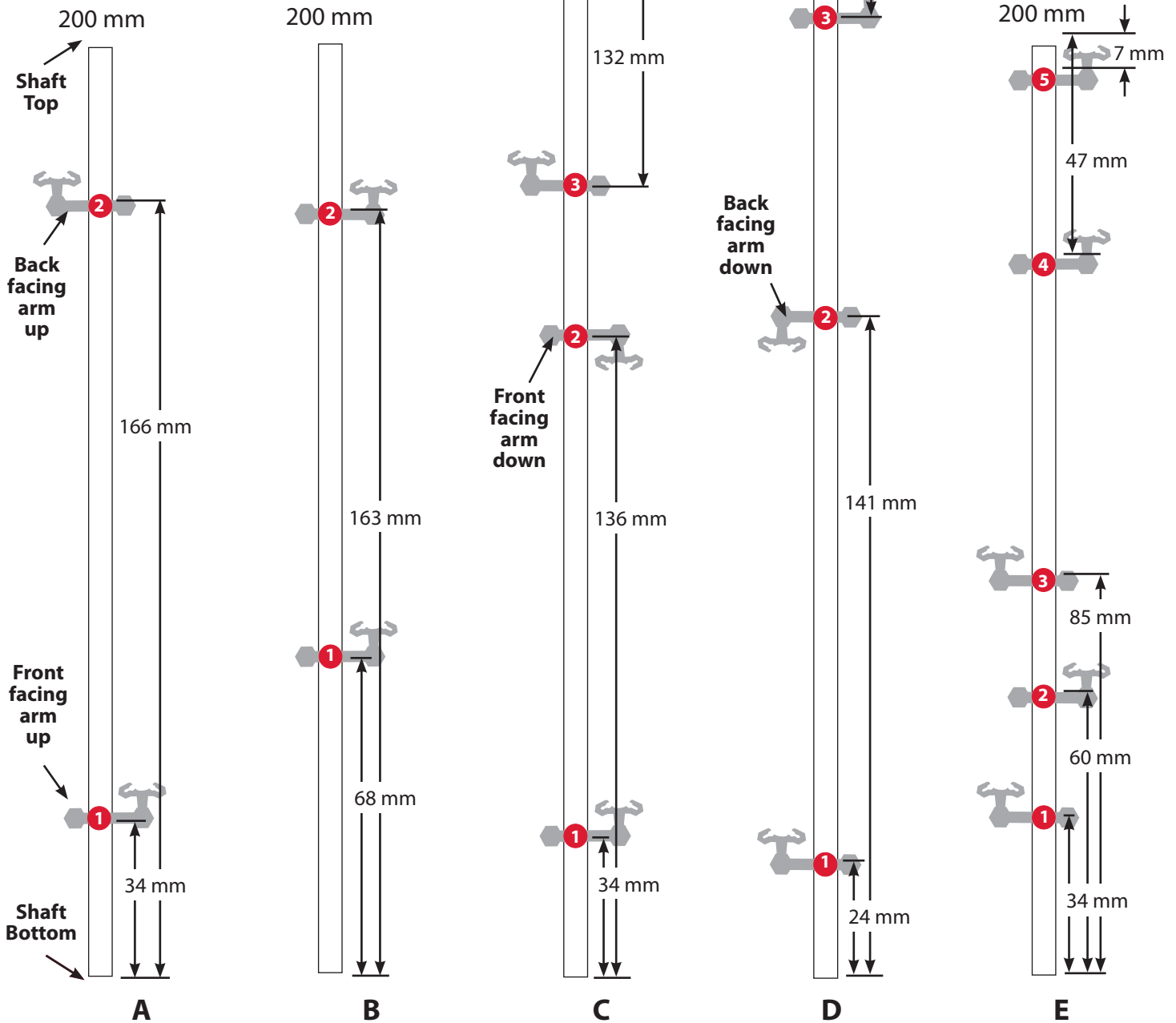


Step 9: Attach an Elevator Guard to each of the three Elevator Rings as shown above. Elevator Guards help prevent the Marble from falling out because it enters fast.

E SHAFT ASSEMBLY & PLACEMENT

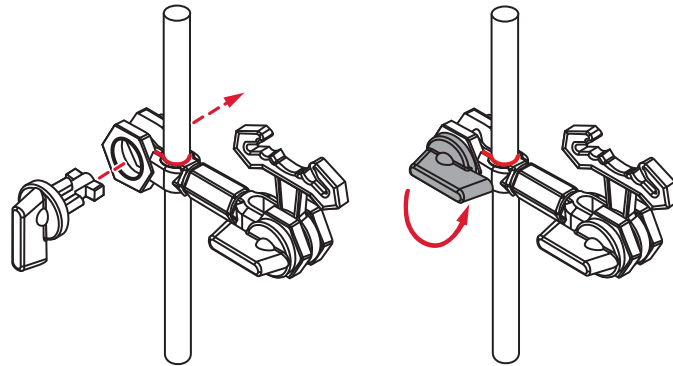
Step 1: Place arms on three 200 mm and two 300 mm shafts according to dimensions show. Note the left and right, up or down orientation of arms. Shafts are shown as if standing up. Measure using ruler either from top of the shaft down or the bottom of the shaft up as indicated. See illustration on next page for arm attachment instructions.

Diagram is not to scale. Use tri-fold insert for an actual size diagram.

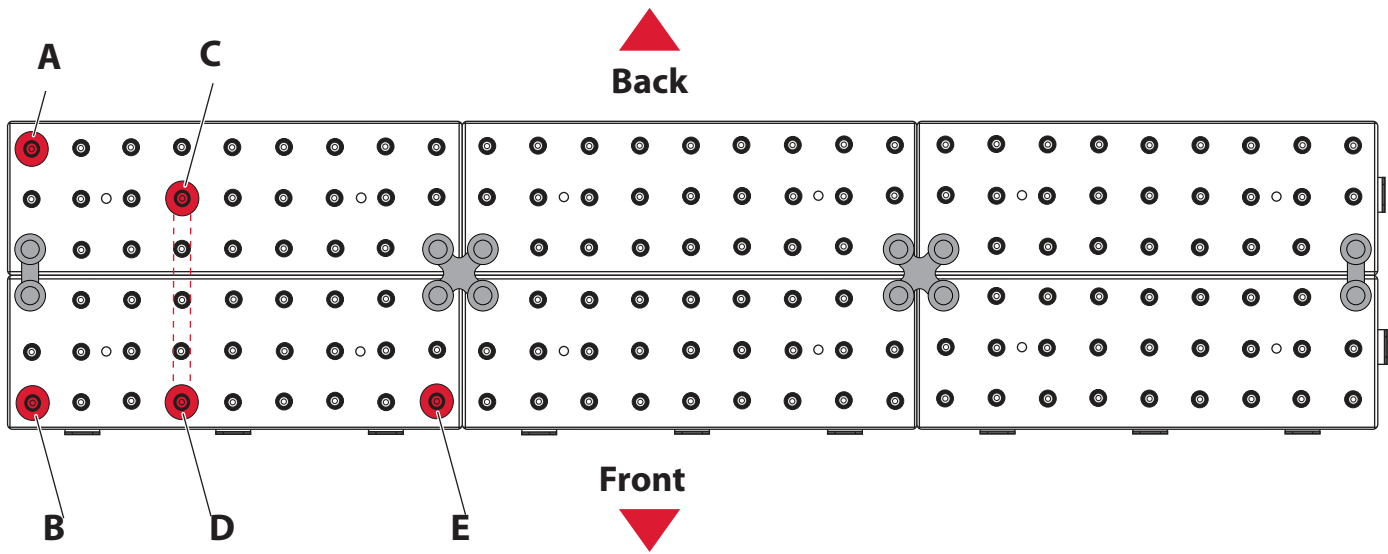


Arm attachment:

Rotate position of arm to match left, right, up, down orientation shown on diagram. Attach to shaft by slightly pulling apart the open arm and inserting shaft. Then insert an Arm Lock and turn to lock in place as shown below. Note: if you incorrectly used an Arm Holder A piece instead of an Arm Holder B piece, the shaft will not fit. See page 5 for the difference and how to correctly assemble the arms.

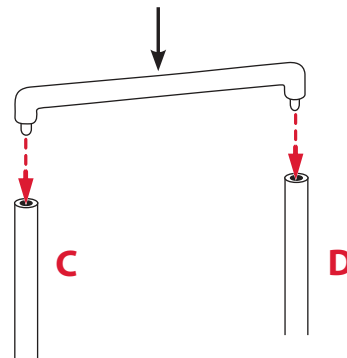


Step 2: Insert shafts A-E (bottom first) into the base assembly matching the shaft letter with the positions shown below. Be sure to press shafts in firmly so they don't rotate easily. Pay attention to back, front, up, down position of arms as shown on diagram.



Step 3: Insert 1 Shaft Connector into the tops of the C and D shafts to lock them in place.

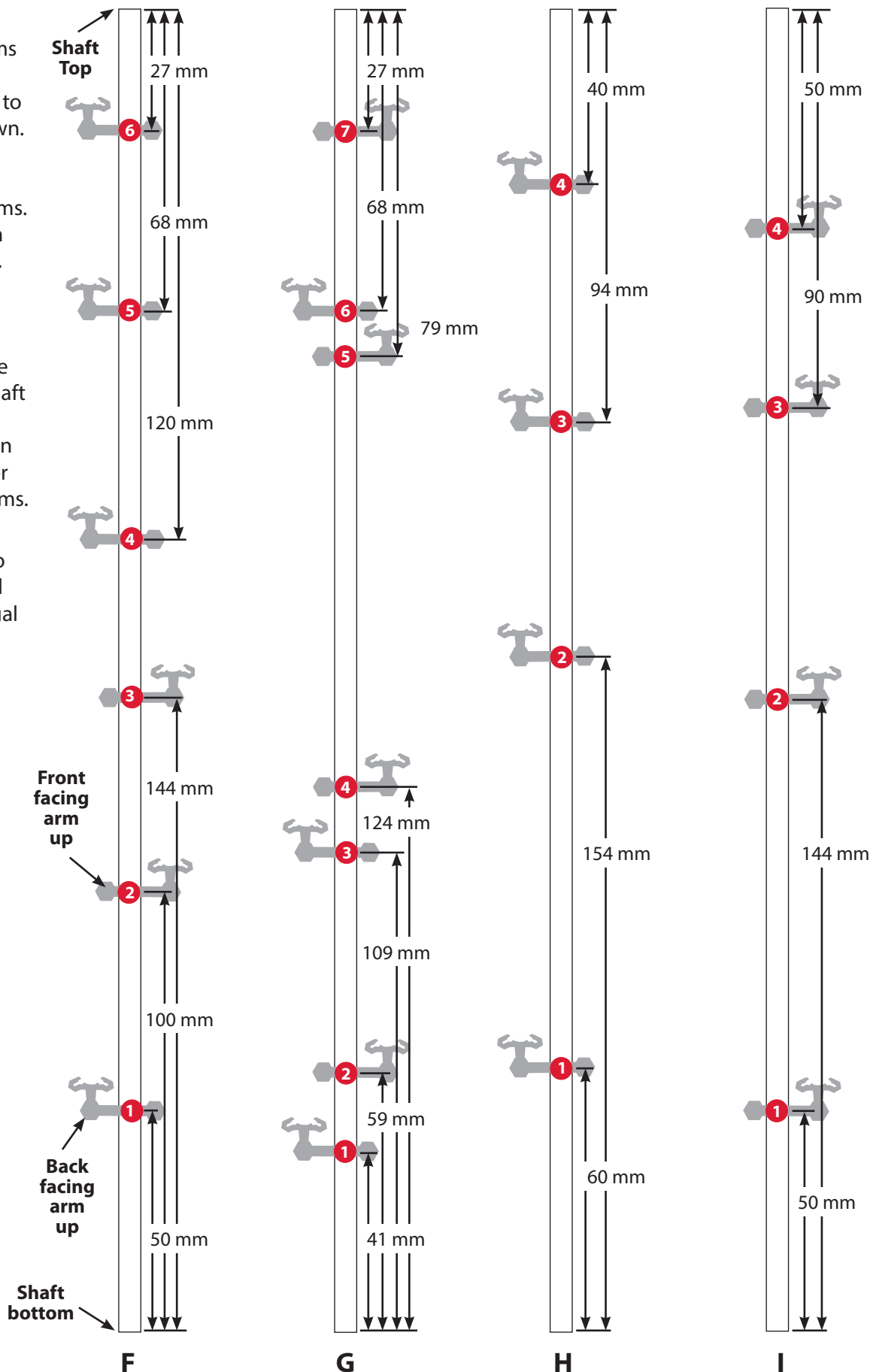
Shaft Connector



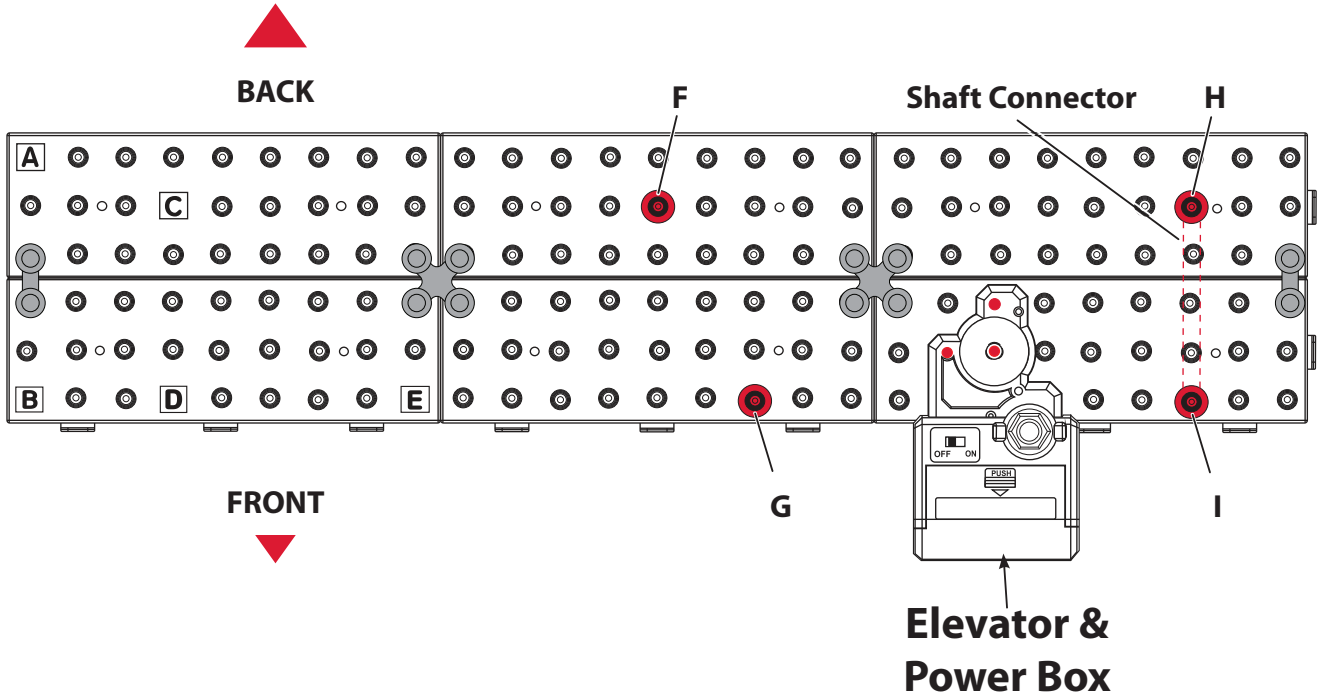
F SHAFT ASSEMBLY & PLACEMENT PART 2, POWER BOX PLACEMENT

Step 1: Place arms on four 300 mm shafts according to dimensions shown. Note the left and right orientation of arms. Shafts are shown as if standing up. Measure using ruler either from top of the shaft down or from the bottom of the shaft up as indicated. See illustration on previous page for how to attach arms.

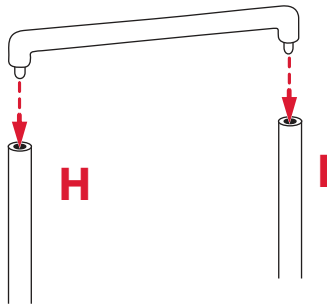
Diagram is not to scale. Use tri-fold insert for an actual size diagram.



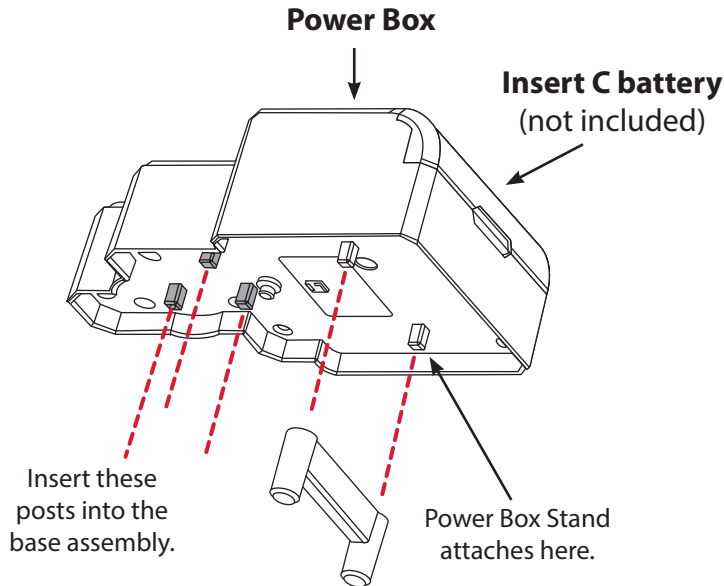
Step 2: Insert shafts F-I (bottom first) into the base assembly matching the shaft letter with the positions shown below. Pay attention to back, front, up, down position of arms as shown on diagram.



Step 3: Insert 1 Shaft Connector into the tops of the H and I shafts to lock them in place.



Step 4: Insert the Power Box Stand into the bottom of the Power Box on the bottom of the elevator as shown below. Insert C battery (not included) into Power Box battery compartment. Attach the entire elevator to the base assembly by inserting the three posts in the bottom of the Power Box into the positions shown in the diagram above.



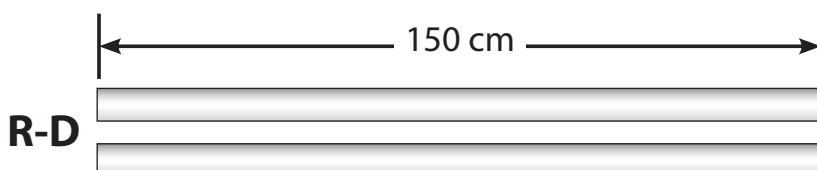
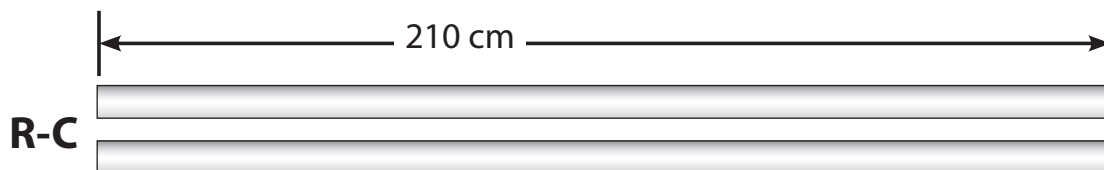
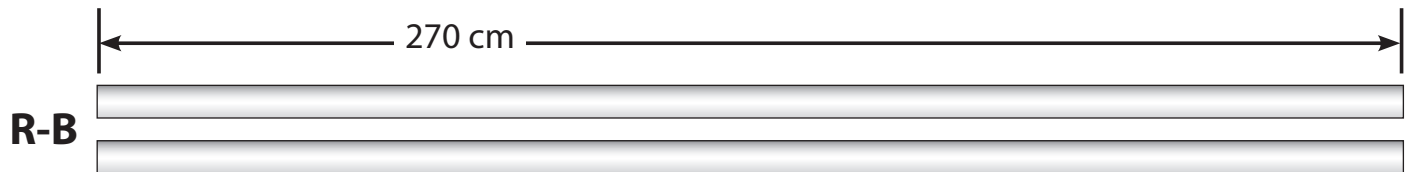
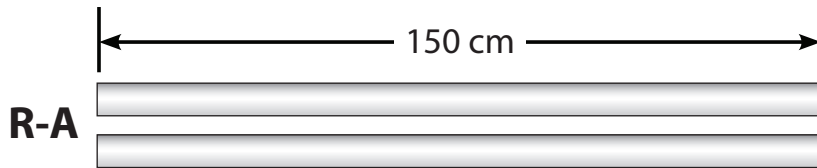
G CUT THE RAILS TO SIZE

Step 1: Lay out rail on a flat surface. Measure each section and mark the cutting point with a pen.

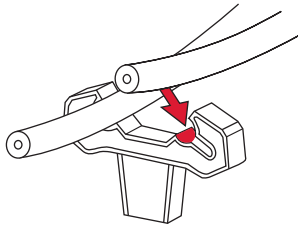
Step 2: Cut each of the 8 rail sections according to the measurement shown below. Make sure to cut at a 90° angle.

NOTE:

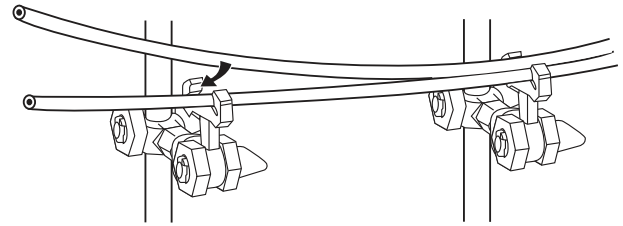
All of these rail dimensions include extra rail. They will all need to be cut shorter based on their final placement and positioning. It is easier to position with more rail than you need and then cut a long rail shorter. Illustration of rail lengths is **not to scale**. Please see the included tri-fold with printed ruler for laying the rail out on a template to measure.



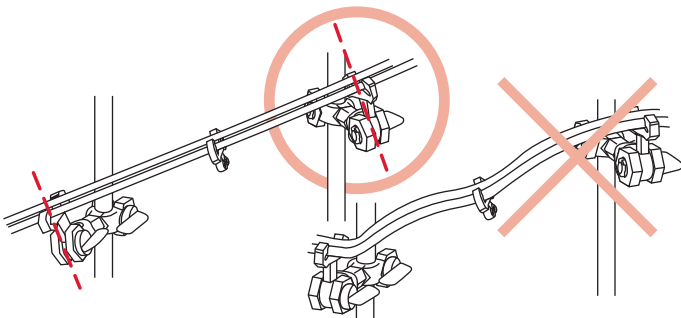
2 ASSEMBLING THE RAILS: READ BEFORE YOU BEGIN



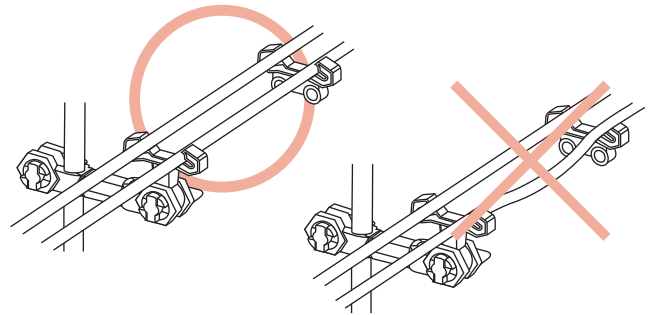
Connecting rails to arms: To install the rails, press them into the arm until you hear a click. **Remove rails to reposition by pulling to center. DO NOT SLIDE RAILS while still locked in arms or you may break the arms.**



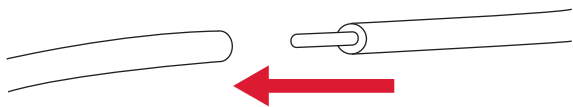
Rail side: When installing Rails, make sure you keep each rail always on the inner side or always on the outer side of each arm as you install. Crossing over will prevent the Marble from going down the track.



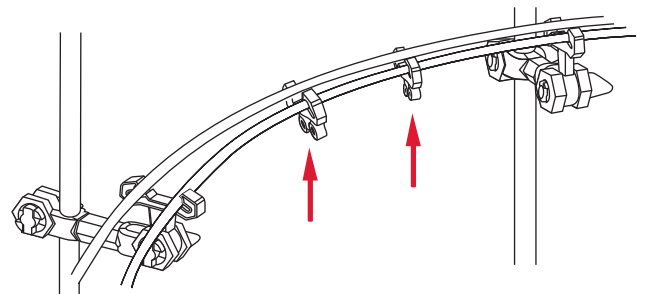
Angling the Arms: Rotate arms on shafts and adjust the angle of the arms to match the incline the rails will travel along. See diagrams for rotation positions.



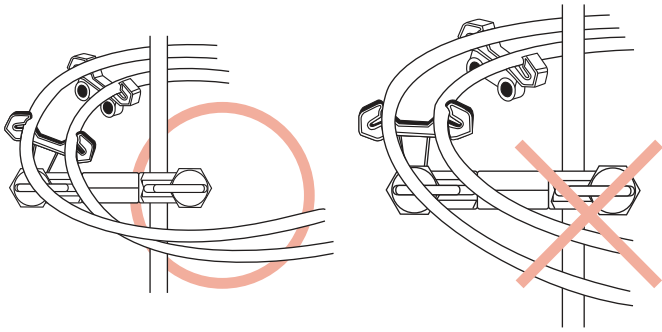
Smooth rails for efficient travel: Make sure the rails connect smoothly and are free of any bumps, twists, or kinks.



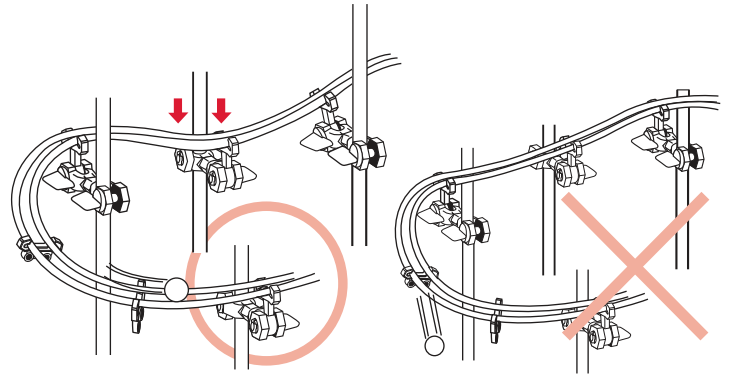
Rail joining: To join to pieces together, use Rail Couplings. You may also use the Rail Couplings to create custom designs using different lengths.



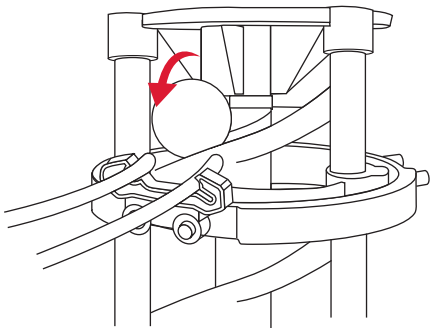
Rail stability: To maintain stability on longer track segments, attach Rail Clips between arms, usually one between each set of arms, but use as needed. Twisting Rail Clips also changes the angle of the rails.



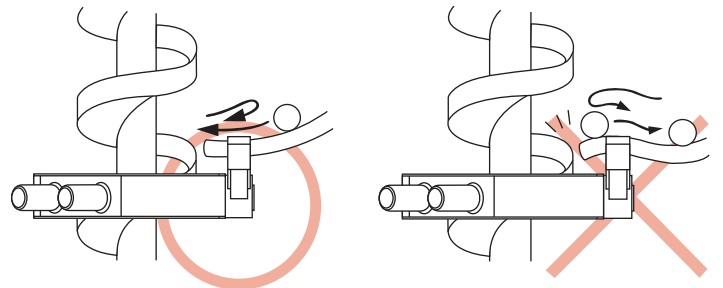
Corner shape: To help the Marble maintain speed, shape corner rails like the above, not like a straight section. You may need to use Rail Clips to create the curve.



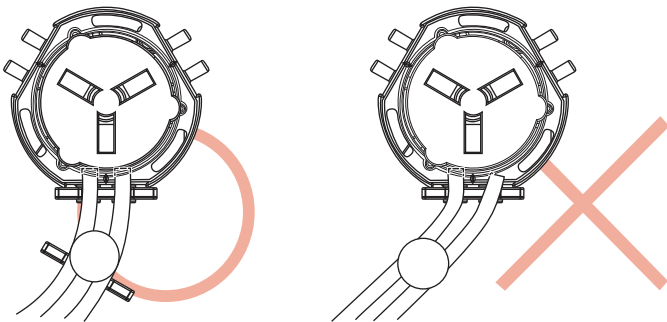
Slow before corners: Reduce Marble speed before taking a corner by lowering the rail track via the arm.



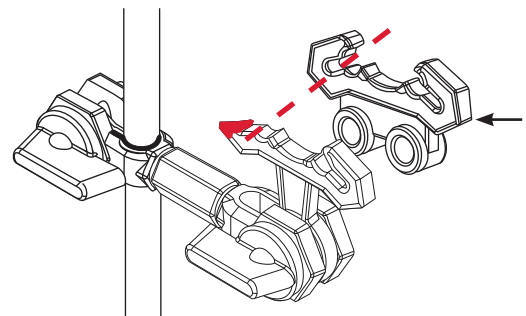
Elevator exit: When installing the elevator exit rails, pull the rails close to the Elevator Helix to ensure the Marble enters the roller coaster smoothly.



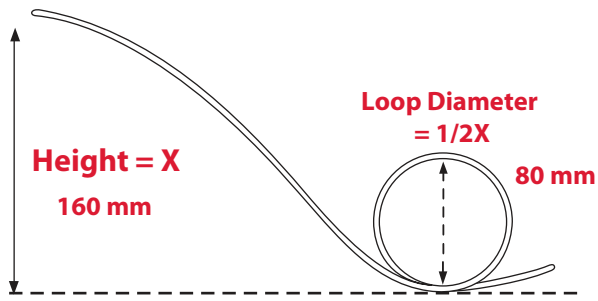
Elevator entry: Make sure the rails enter the elevator straight and aren't too long, or angled, or the Marble will hit the elevator shaft and bounce out.



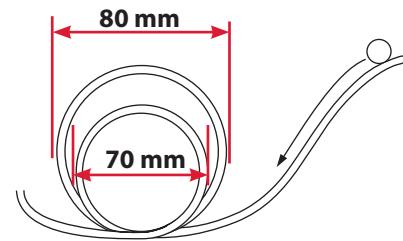
Elevator entry angle: Make sure the rails are not overly angled upon entry to the elevator. You may need to place a Rail Clip before the entry to straighten.



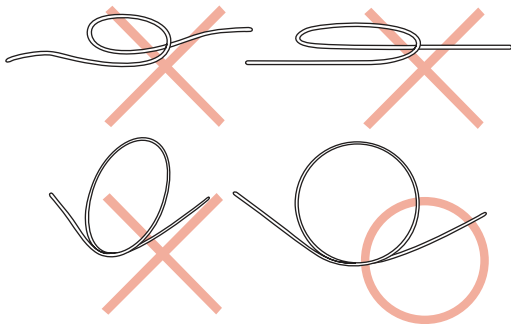
Broken Arm Clip: If you end up accidentally breaking an arm clip, replace it with a spare. If you have no more spares, place a Rail Clip before or after it at the same angle as the Arm Clip.



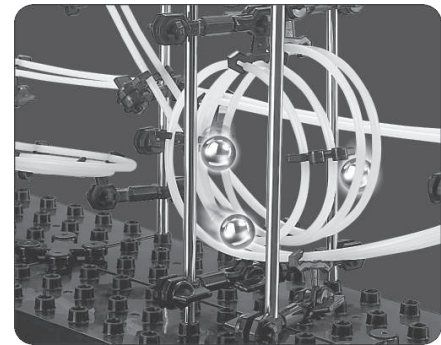
Building the space loop: For the loop to work, the diameter of the first, larger, loop has to be 1/2 the height of the fall. The first loop should be 80 mm in diameter.



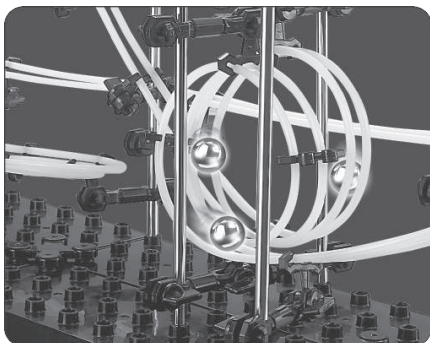
2nd loop size is smaller: The second loop must be smaller than the first loop to keep the Marble running. It is 70 mm in diameter. Measure with a ruler.



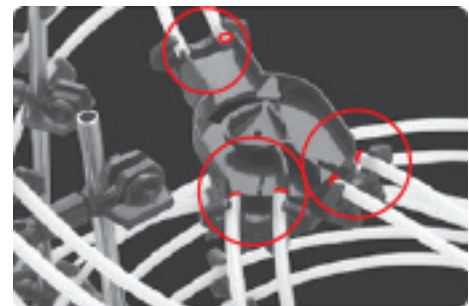
Loop shape: Make sure your loops are a nice even circle and are fully upright. Use Rail Clips to help maintain shape.



Close up of finished space loops: Note the vertical alignment, shape, and the two different loop sizes. Also note the placement of Rail Clips.



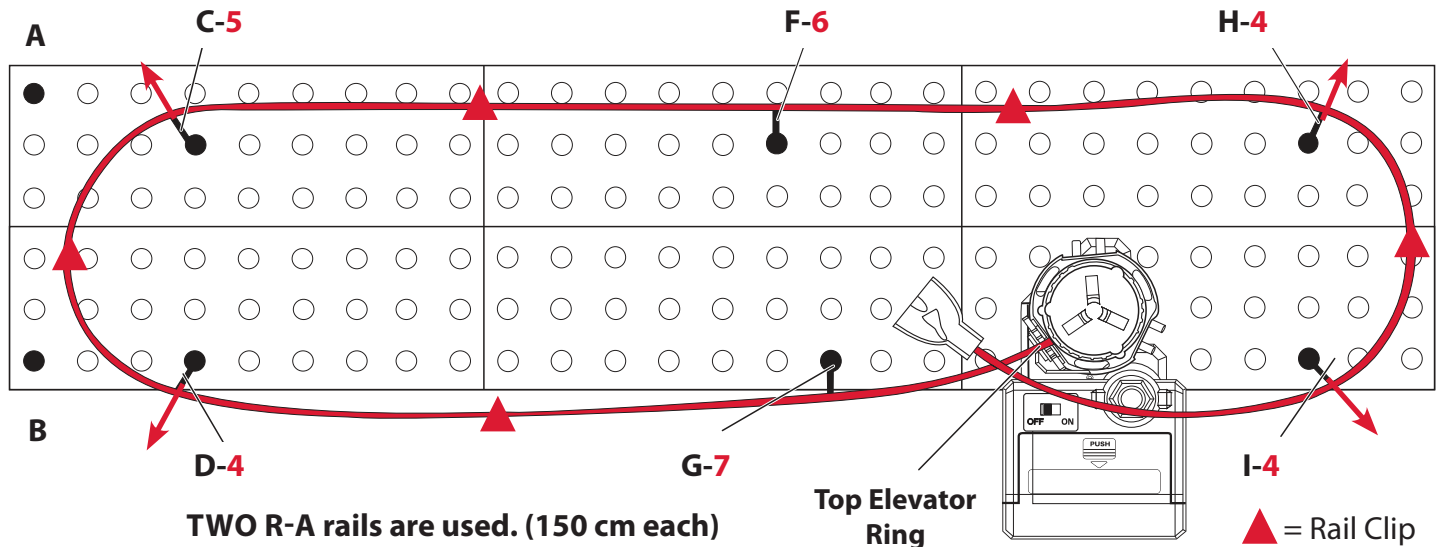
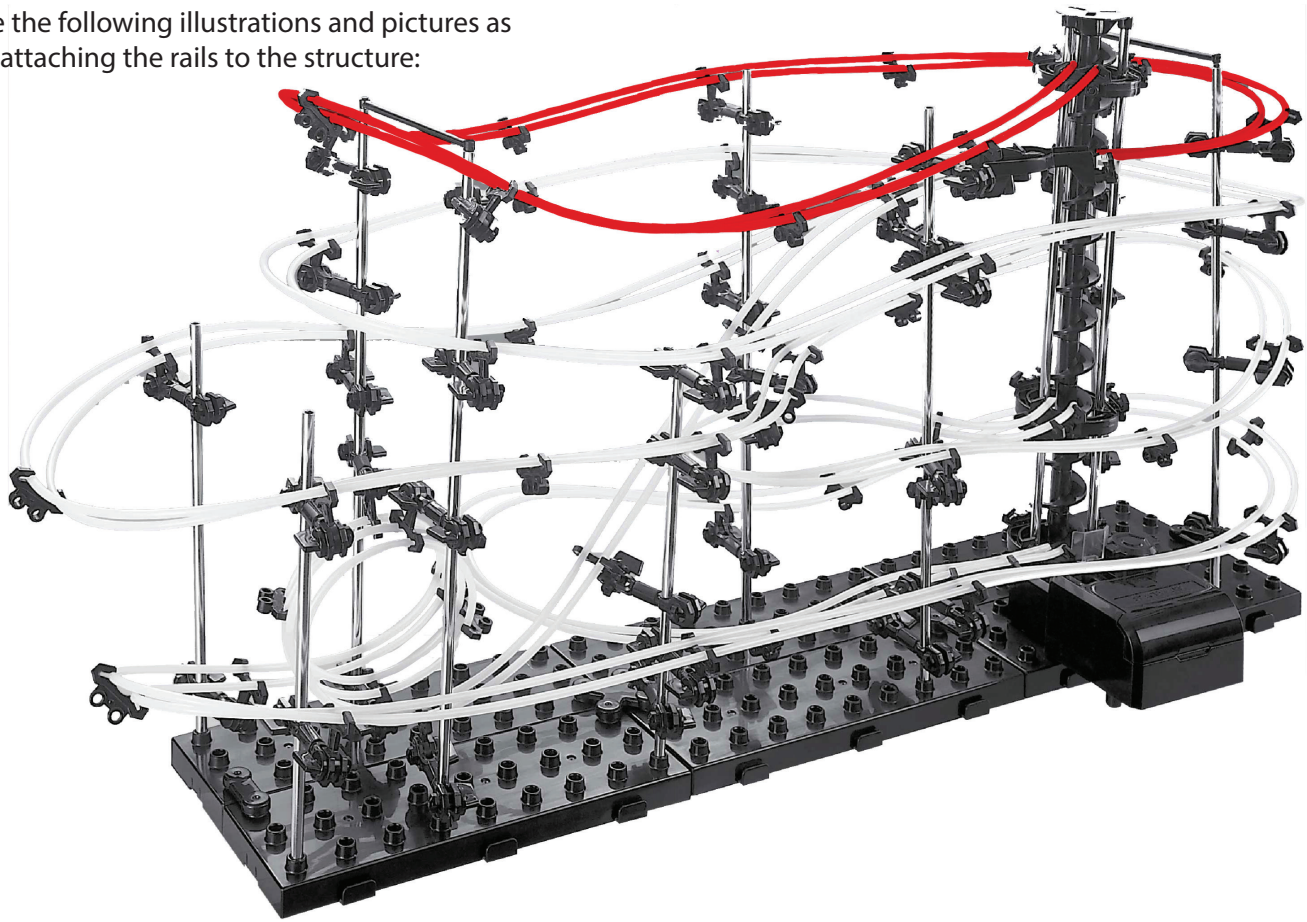
Close up of finished space loops: Note the vertical alignment, shape, and the two different loop sizes. Also note the placement of Rail Clips.



Rails entering Rail Splitter: Trim the rails at 90° and make sure they are not longer than shown in the image.

A CONNECT TWO R-A RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



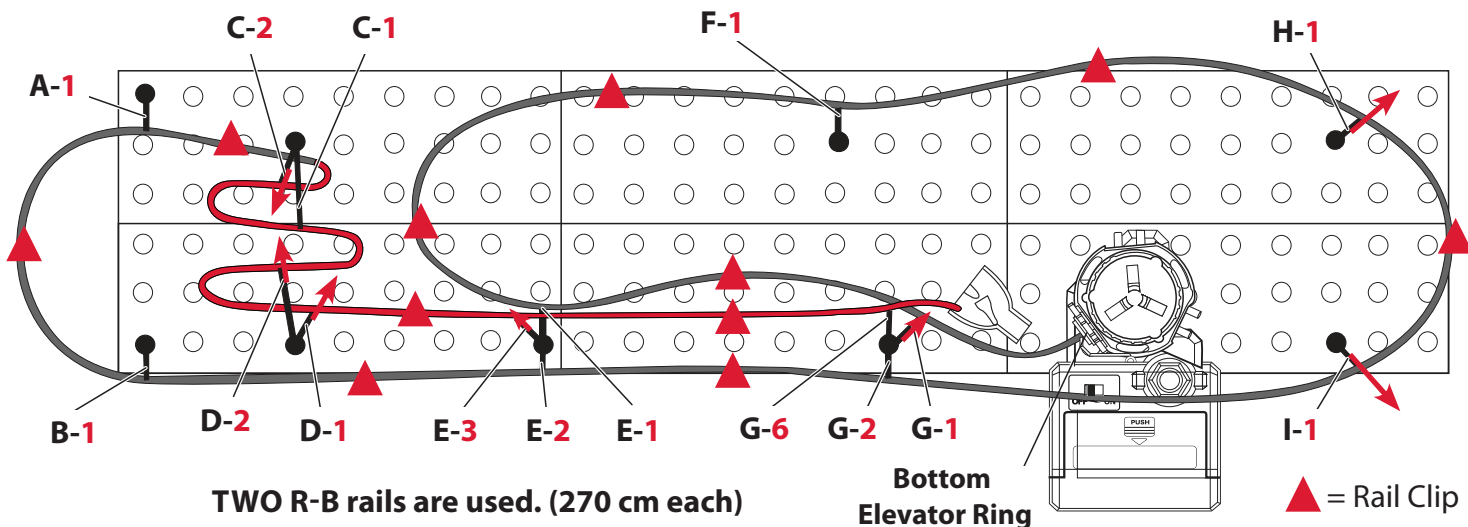
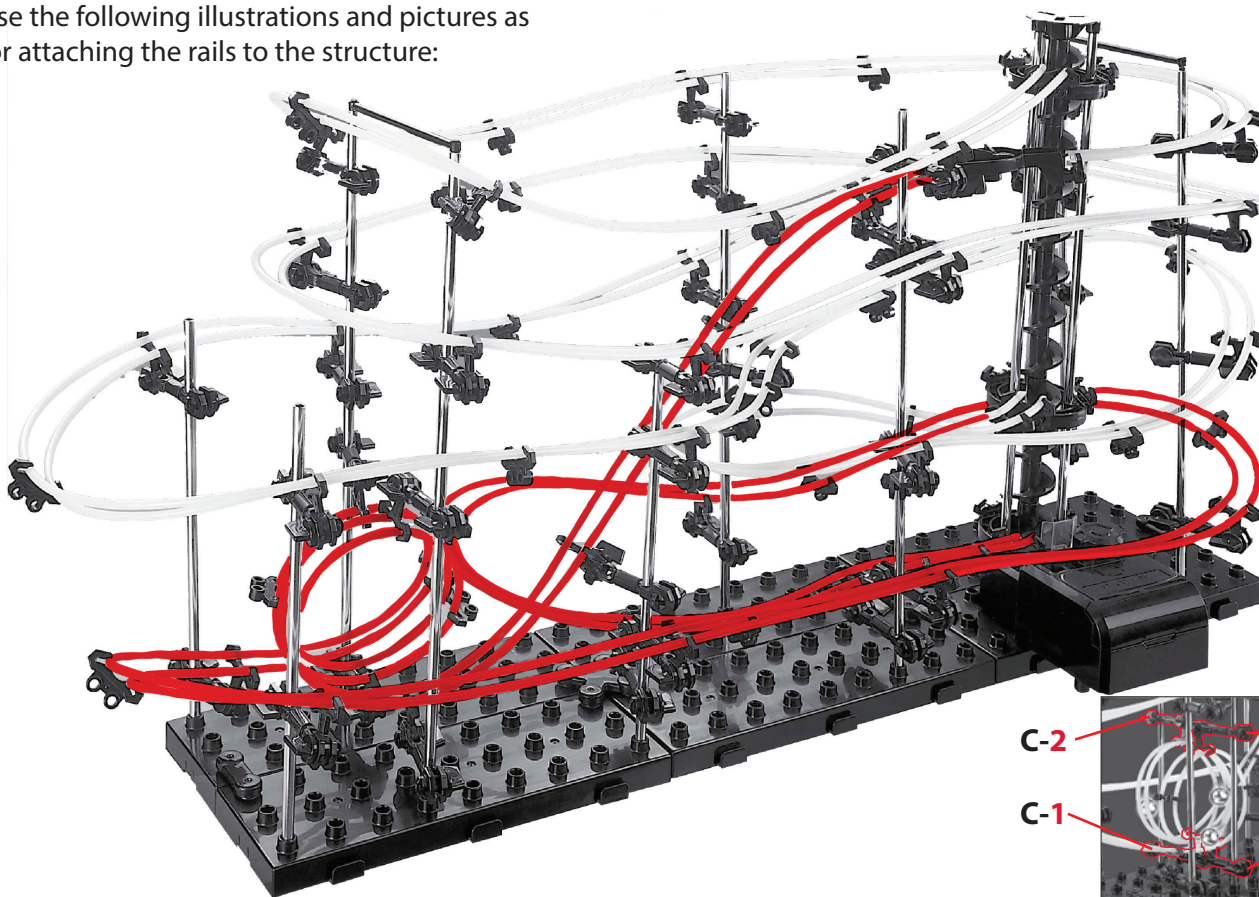
Step 1: Rotate one rail arm on C, D, H, and I shafts to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **For Example, D-4 is the 4th arm from the bottom on the D shaft.**

Step 2: Connect two R-A rails starting at the top ring on the elevator shaft and going left, connect at G-7, D-4, C-5, F-6, H-4, I-4 and then connecting the end into the back side of the Rail Splitter. Rail Splitter will hang freely and there will be extra rail at the end. Leave extra rail until the end of Step 3.

Step 3: Starting at the elevator shaft, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you end at the Rail Splitter. After making sure the rails look correct, cut excess rail using scissors. Refer to photo above for how the final cuts should look.

B CONNECT TWO R-B RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



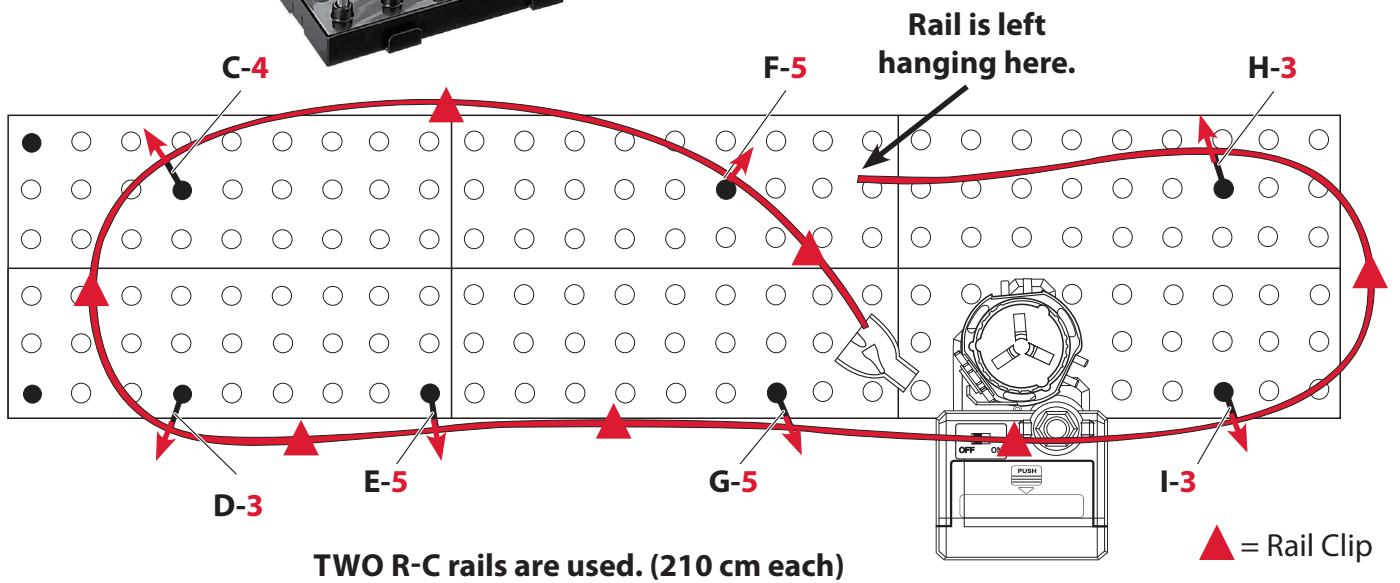
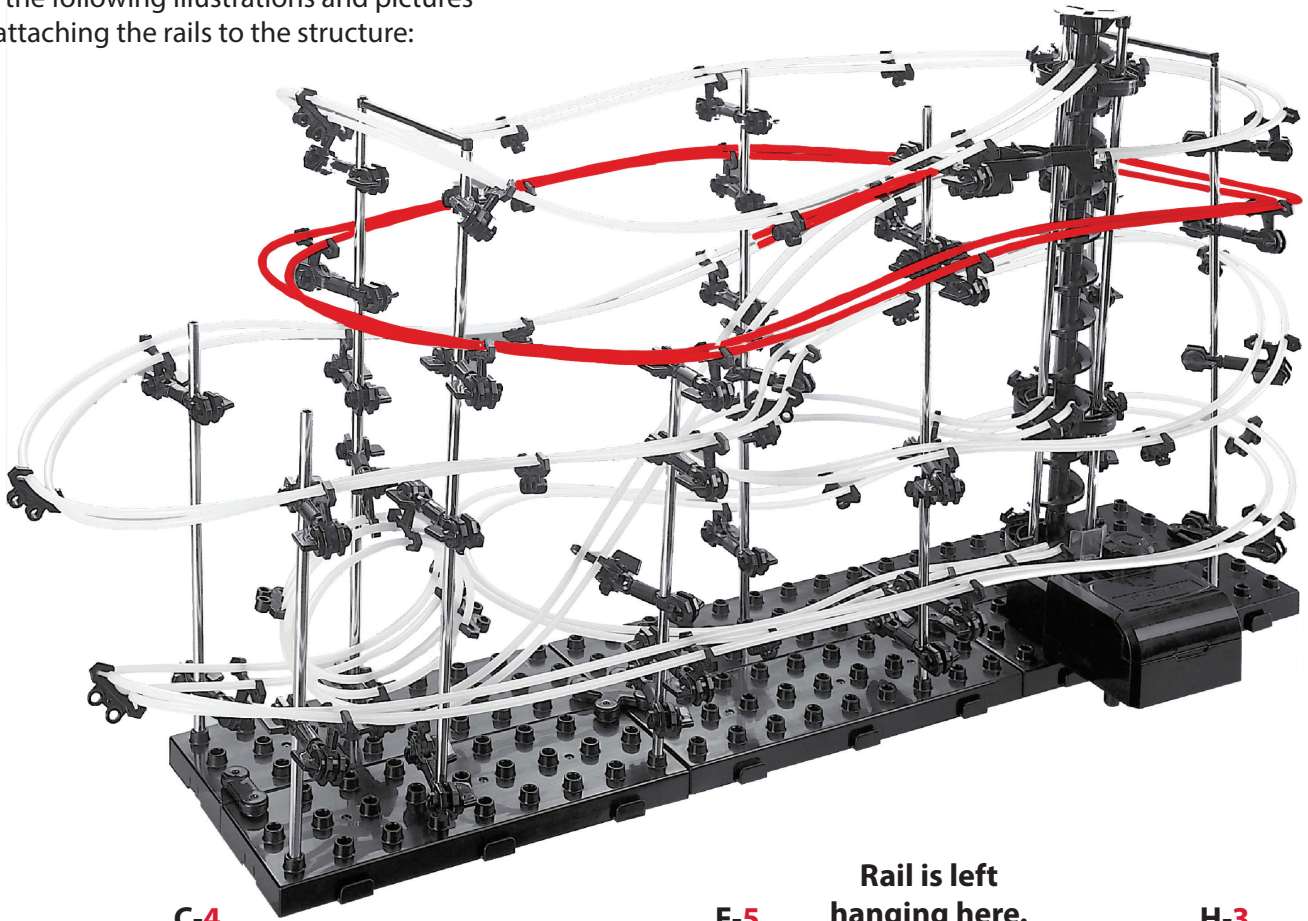
Step 4: Rotate one rail arm on C-2, D-1, D-2, E-2, G-2, H-1, and I-1 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **Example: E-3 is the 3rd arm from bottom on the E shaft.**

Step 5: Connect two R-B rails starting at the bottom ring on the elevator shaft and going left, connect at G-1, G-2, E-1, F-1, H-1, I-1, G-2, E-2, B-1, A-1. Space loop begins at C-2 and should be 80 mm in diameter to C-1, at D-2 it shrinks to 70 mm in diameter (see page 14 loop instructions) through D-1. After loop continue to E-3, G-6 and then connecting the end into the back side of the Rail Splitter. There will be extra rail at the end. Leave extra rail until the end of Step 3.

Step 6: Starting at the elevator shaft, straighten rails and place a Rail Clip in between each Shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you end at the Rail Splitter. After making sure the rails look correct, cut excess rail using scissors. Refer to photo above for how the final cuts should look.

C CONNECT TWO R-C RAILS

Use the following illustrations and pictures for attaching the rails to the structure:



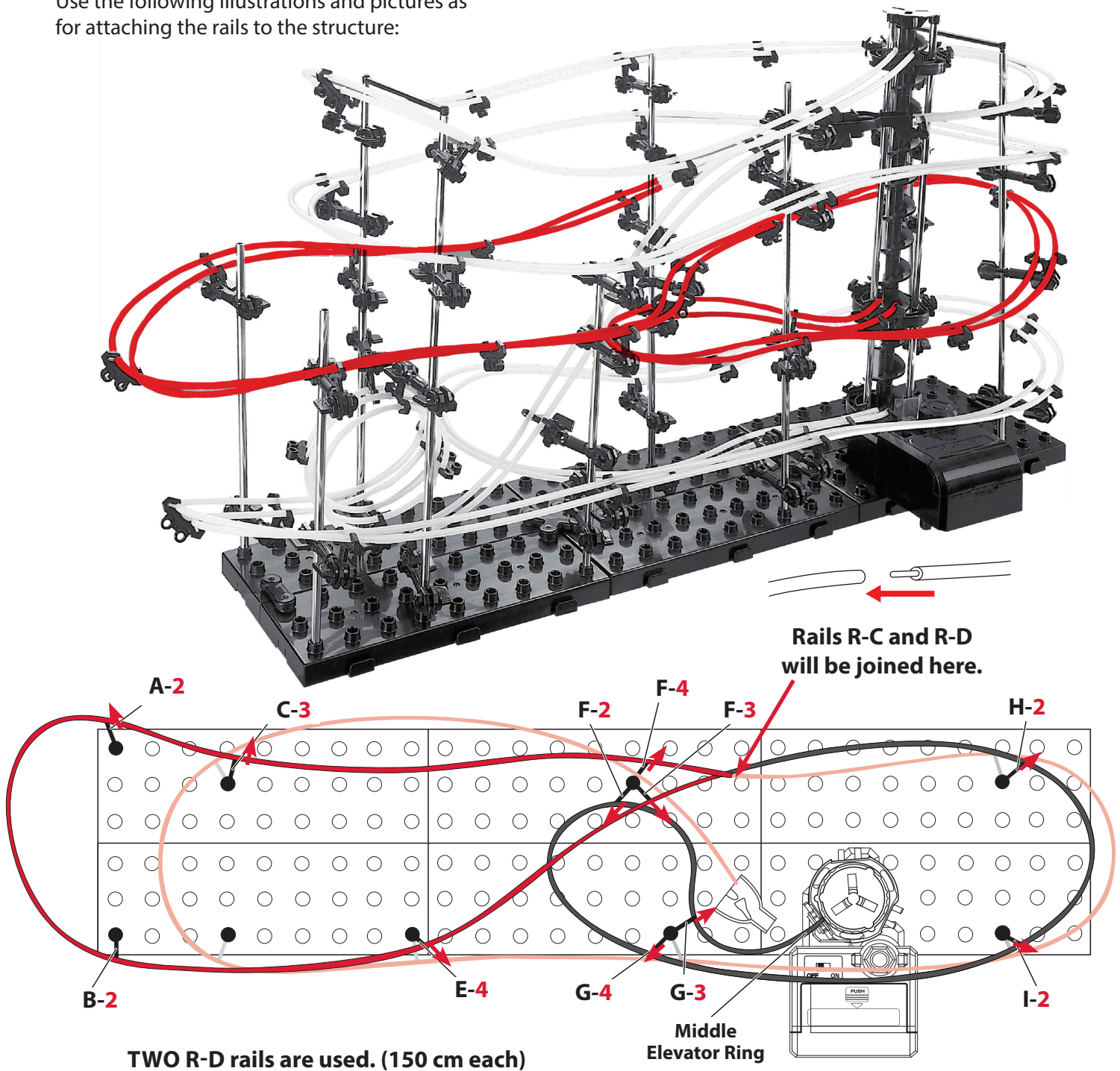
Step 7: Rotate one rail arm on C-4, D-3, E-5, G-5, I-3, and H-3, and F-5 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **D-3 is the 3rd arm from the bottom on the D shaft.**

Step 8: Connect two R-C rails starting at the right front side of the Rail Splitter and going to F-5, C-4, D-3, E-5, G-5, I-3-H-3 and leaving the rails hanging as shown. These will be joined with the next set of rails. There will be extra rail at the end. Leave extra rail until the end of Step 12.

Step 9: Starting at Rail Splitter, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you finish between I-3 and H-3. Leave excess rail hanging.

D CONNECT TWO R-D RAILS AND JOIN WITH TWO R-C RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



Step 10: Rotate one rail arm on A-2, C-3, F-2, F-4, F-3, H-2, I-2, G-3, G-4, and E-4 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **D-3 is the 3rd arm from the bottom on the D shaft.**

Step 11: Connect two R-D rails starting at the middle elevator ring and going to G-3, F-3, F-2, G-4, I-2, H-2, E-4, B-2, A-2, C-3, F-4, and leave hanging at joint until end of Step 12. There will be extra rail at the end. Leave extra at this point.

Step 12: Starting at middle elevator ring, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced (red triangles are not shown to help with visual clarity of the rails.) Go from section to section until you reach where the two sets of rails are hanging. Start by cutting one set of the rails even with each other. Then overlap the other set and cut so they will join evenly. Insert the rail connectors into the ends of one set, then join them with the other set.



Seaich Corporation
1910 West 1040 South
Salt Lake City, UT 84104
(833) 732-4242
orders@seaich.com

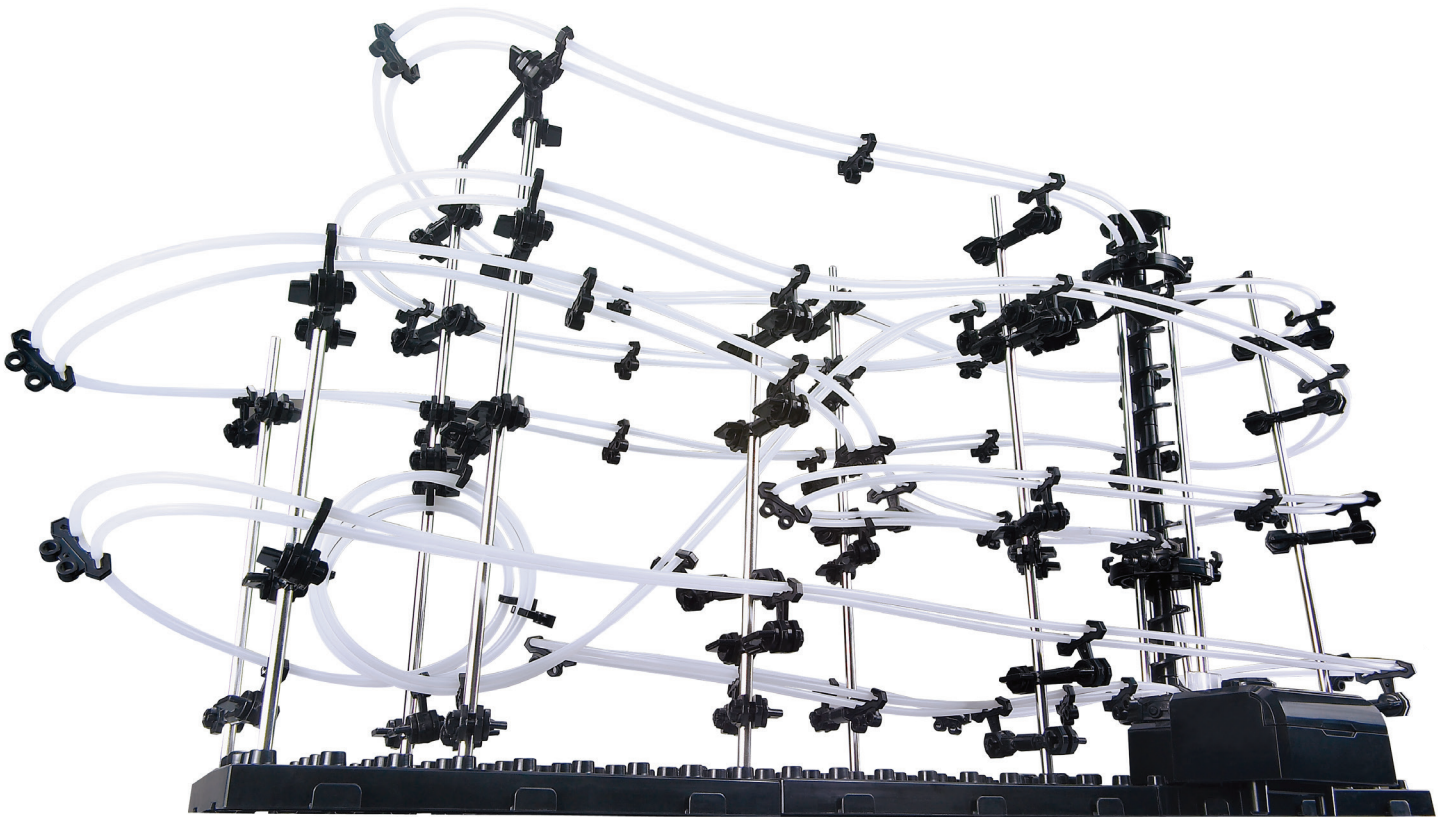


SpaceRails LLC
www.spaceRails.com



SPACERAILS®

LEVEL 3



PRODUCT AND CONSUMER WARNING

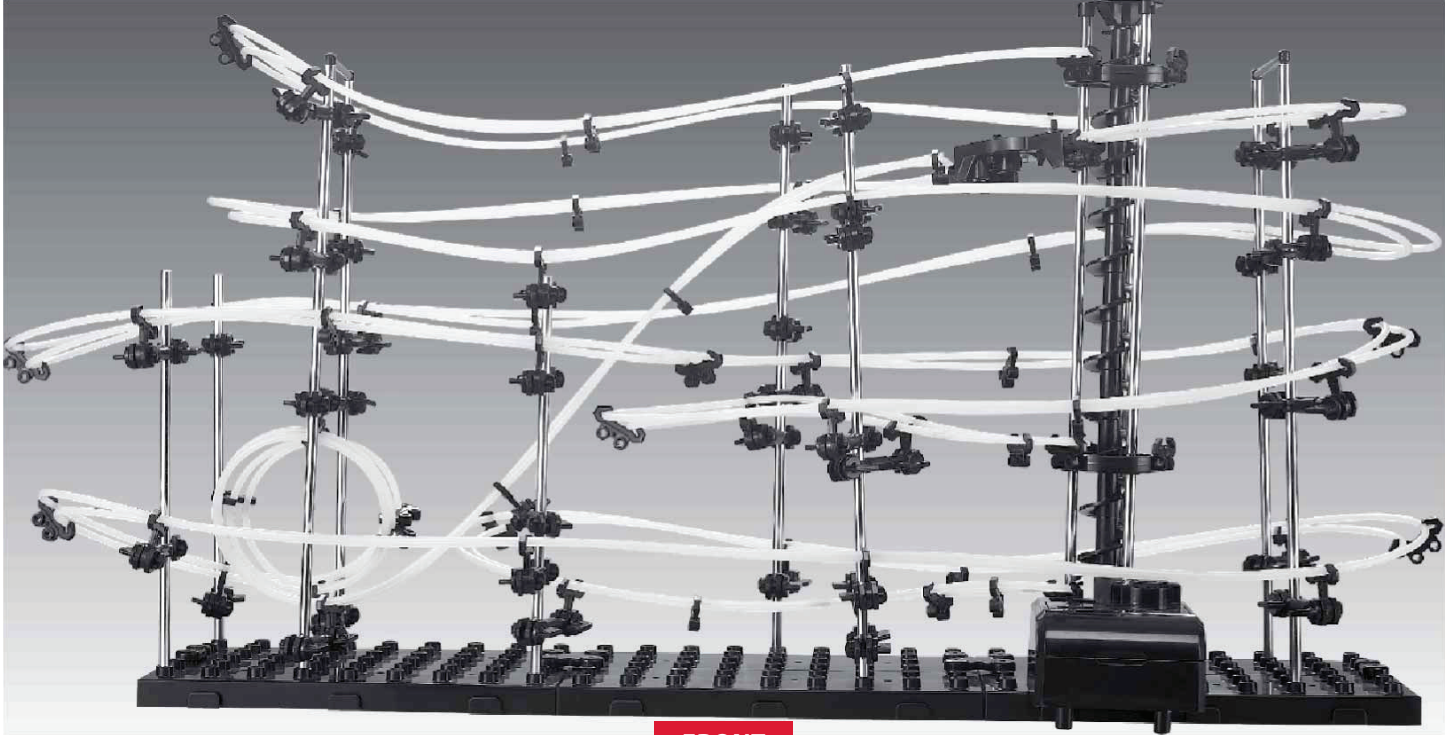
CHOKING HAZARD: This product contains small parts and is not intended for children under 3.

- This product is intended for users 8 years of age and older.
- To avoid choking, keep small parts away from children.
- Use caution—this product contains parts with sharp edges.
- To avoid potential damage to the product, only insert the included marbles into the elevator.

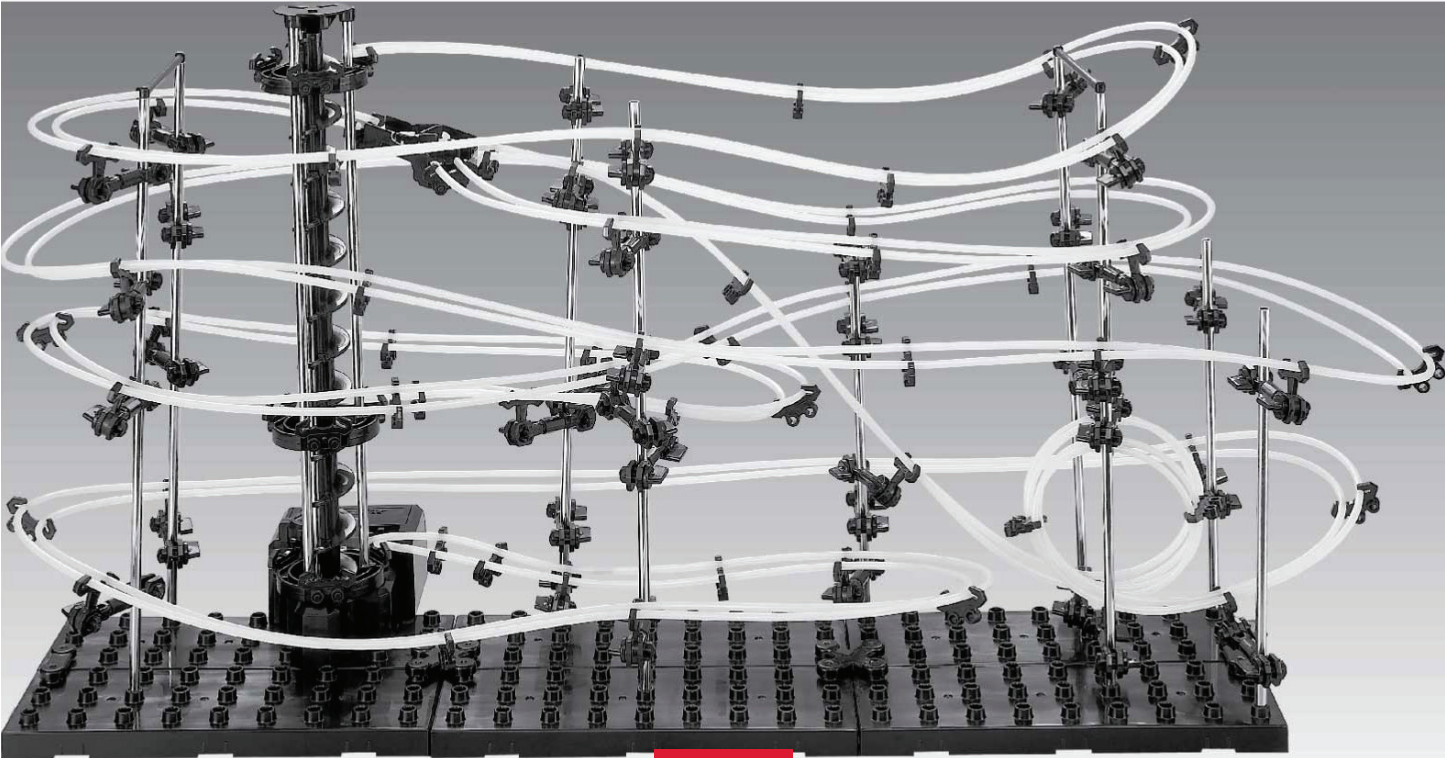


LEVEL 3

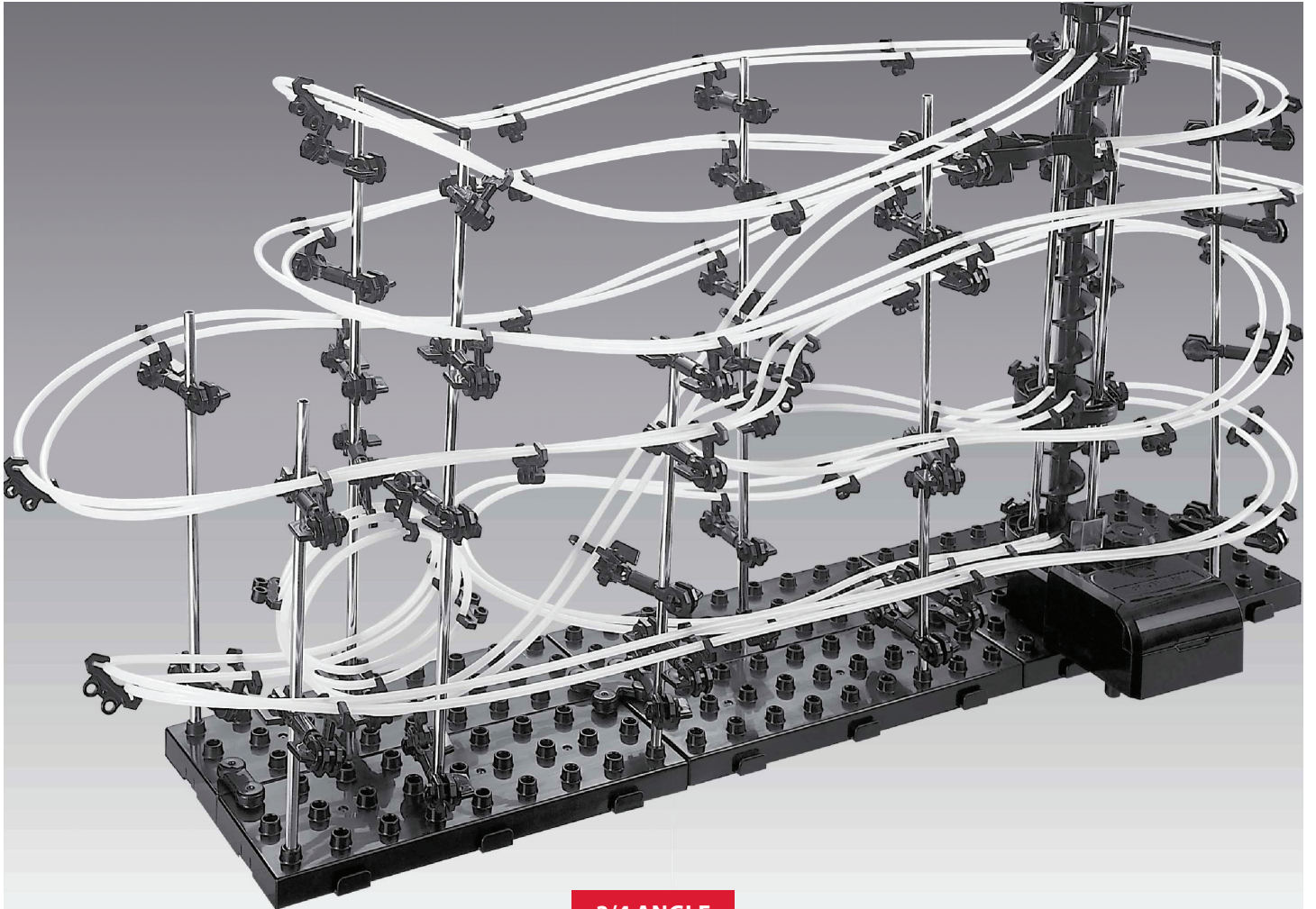
MULTI-VIEW OF FINAL ASSEMBLY



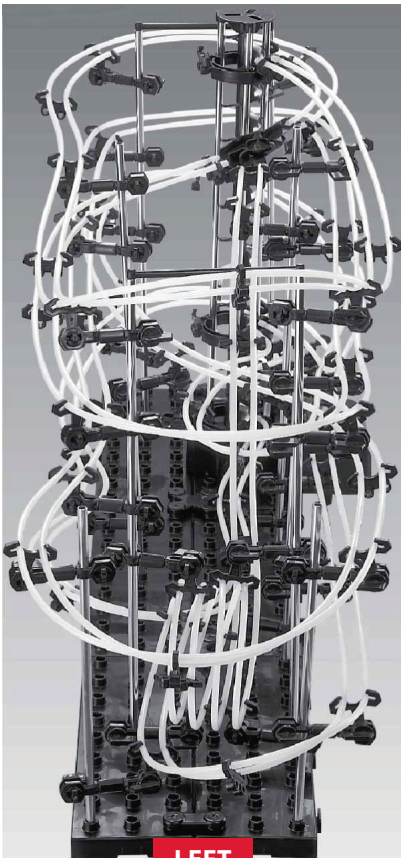
FRONT



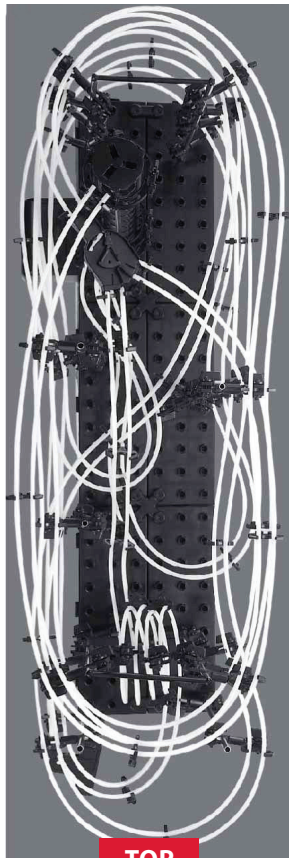
BACK



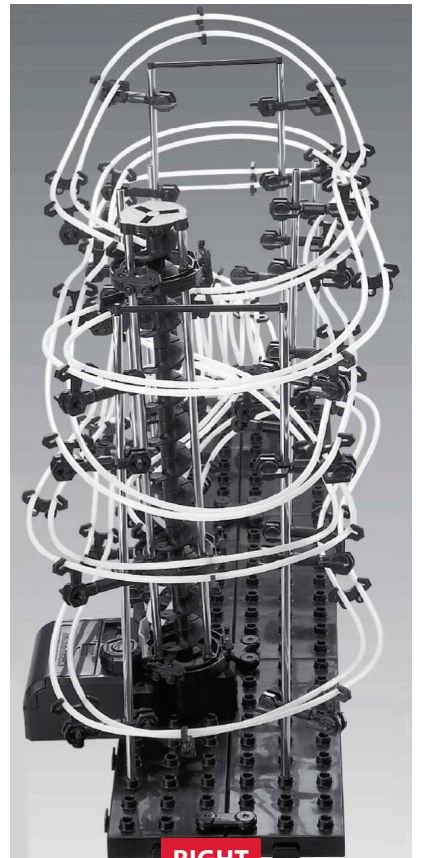
3/4 ANGLE



LEFT



TOP

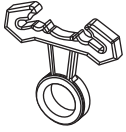


RIGHT

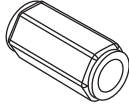
PARTS INCLUDED

Keep parts together to avoid misplacing them.

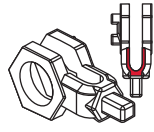
ARM COMPONENTS



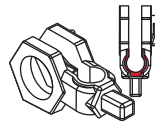
Arm Clip
x40



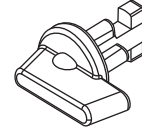
Arm Sheath
x40



Arm Holder A
x40

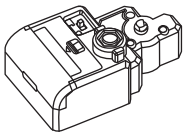


Arm Holder B
x40



Arm Lock
x80

ELEVATOR COMPONENTS



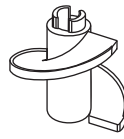
Power Box
x1



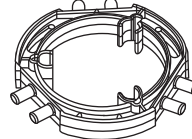
Shaft (300mm)
x10



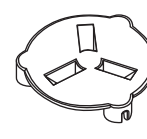
Shaft (200mm)
x3



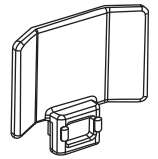
Elevator Helix
x12



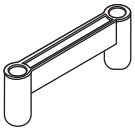
Elevator Ring
x3



Elevator Cover
x1



Elevator Guard
x2



Power Box Stand
x1

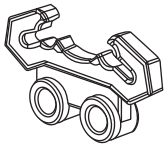


Shaft Connector (90mm)
x1

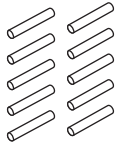


Shaft Connector (50mm)
x1

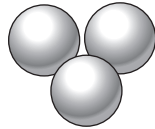
RAIL COMPONENTS



Rail Clip
x45



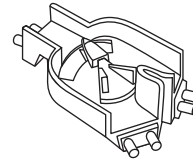
Rail Coupling
x10



Marble
x3

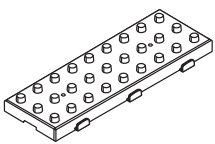


Rail
16000 mm

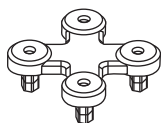


Rail Splitter
x1

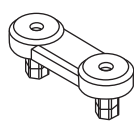
BASE COMPONENTS



Base Plate A
x6



Base Holder A
x2



Base Holder B
x2

REQUIRED TOOLS & ITEMS (NOT INCLUDED)

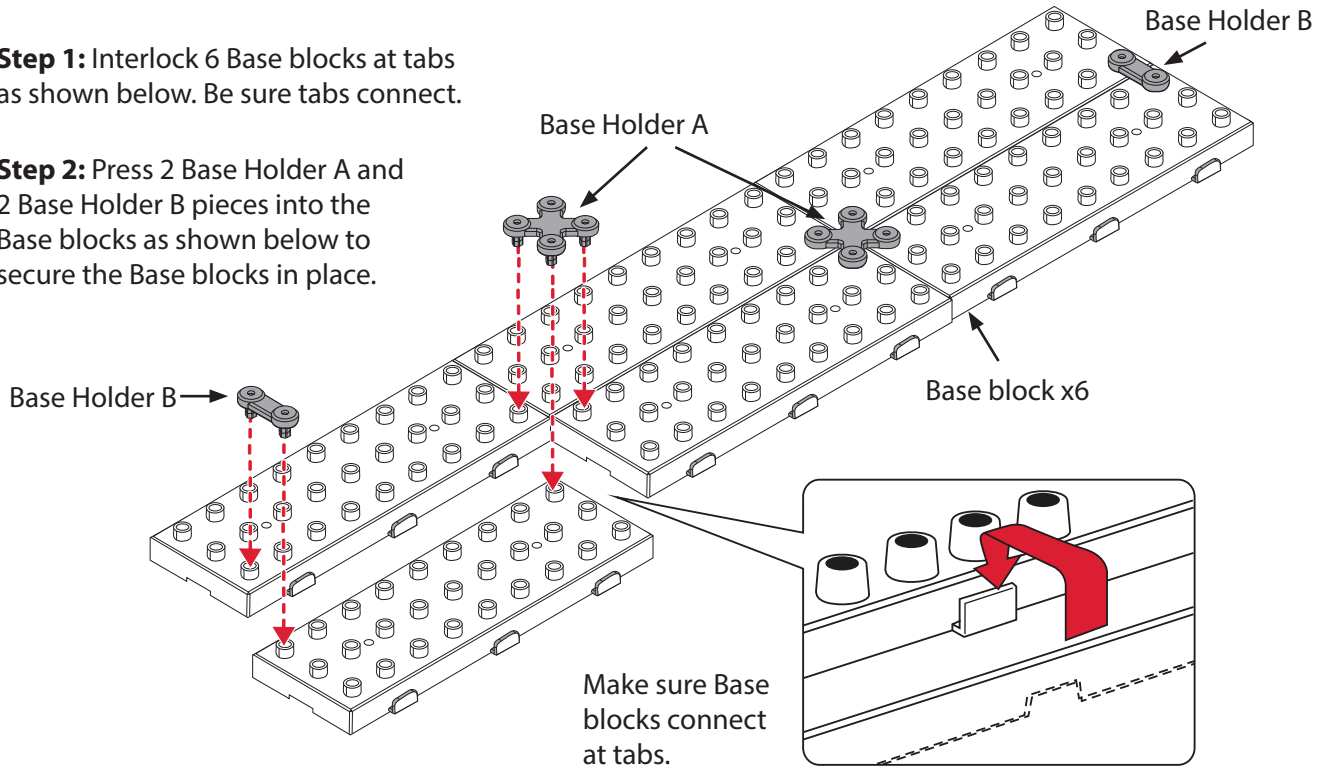
- Wire Cutters or Utility Scissors
- Pen or Marker
- 3 AA Batteries (newer models) or 1 C Battery
- Ruler (in centimeters)

1 PREPARE THE COASTER COMPONENTS

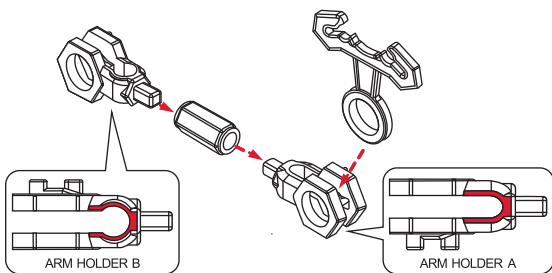
A BASE ASSEMBLY

Step 1: Interlock 6 Base blocks at tabs as shown below. Be sure tabs connect.

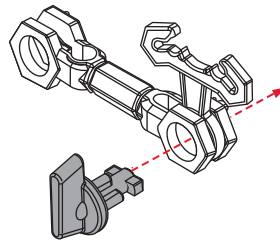
Step 2: Press 2 Base Holder A and 2 Base Holder B pieces into the Base blocks as shown below to secure the Base blocks in place.



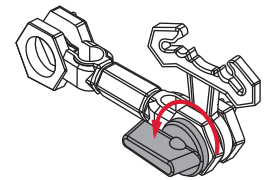
B ARMS (QTY: 40)



Step 1: Attach one Arm Holder A and one Arm Holder B with one Arm Sheath. Insert one Arm Clip into Arm Holder A.



Step 2: Insert Arm Lock through Arm Holder A and Arm Clip.

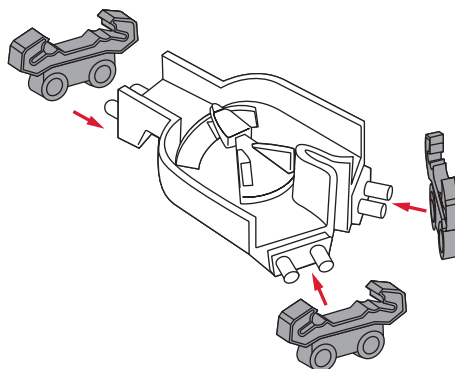


Step 3: Turn the Arm Lock counter-clockwise to secure the Arm Clip in place.



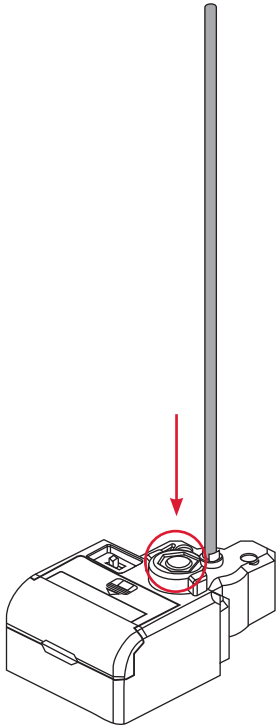
To avoid damaging parts, do not move or adjust the Rail Clip while locked in the arm. To move the Rail Clip, release Arm Lock by turning clockwise, position Rail Clip as desired, then secure Arm Lock again.

C RAIL SPLITTER

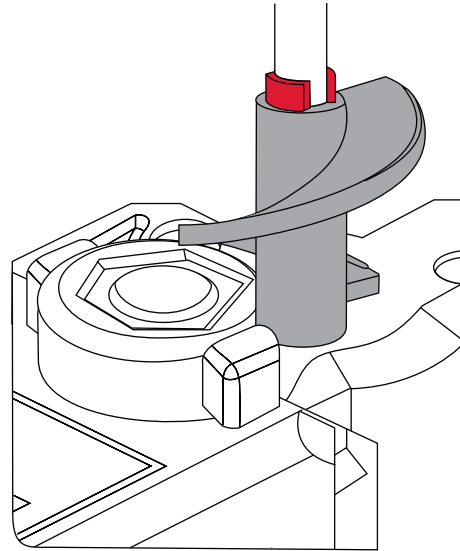


Prepare Rail Splitter: Attach one Rail Clip to each of the 3 Rail Splitter posts (3 total Rail Clips).

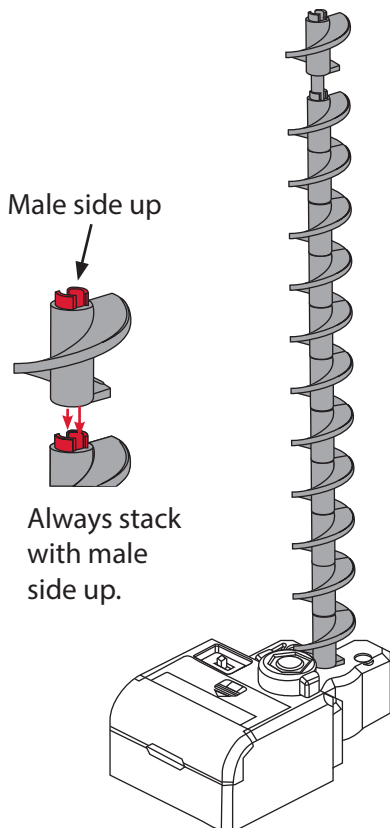
D ELEVATOR ASSEMBLY



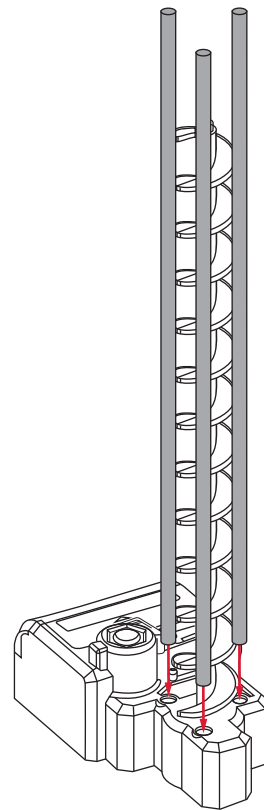
Step 1: Place a 300 mm shaft in the white hole on the Power Box.



Step 2: Install the first Elevator Helix piece male side up and rotate it until it slides in place and engages with driver at the base of Power Box.

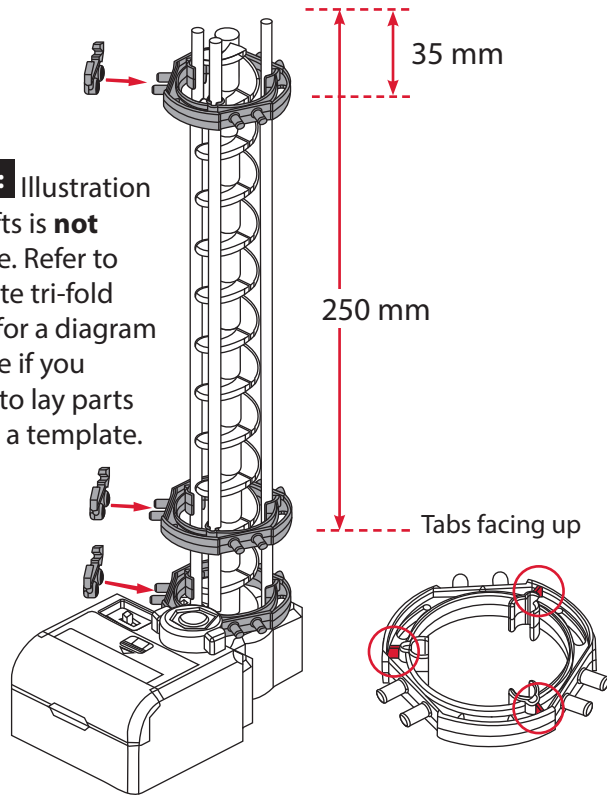


Step 3: Connect 12 Elevator Helix pieces together with the male part facing up to fill the shaft. Rotate each piece so the track lines up with the piece below it.

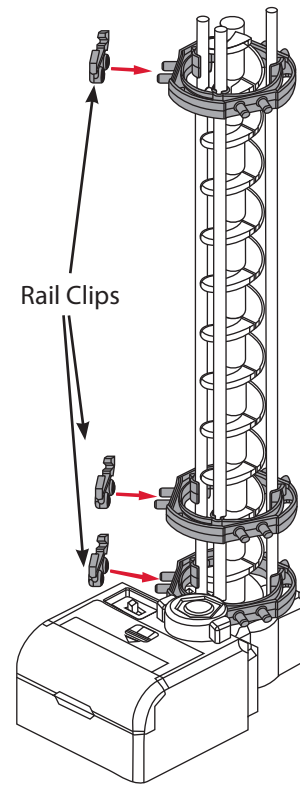


Step 4: Once the corkscrew is built, attach three 300 mm support shafts to the Power Box in the 3 holes shown.

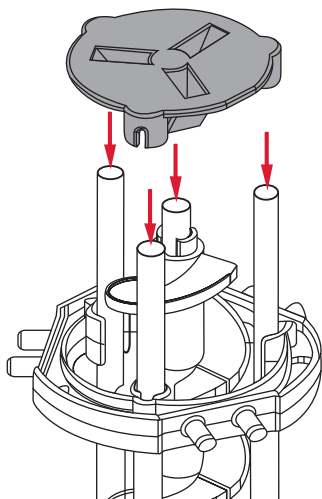
NOTE: Illustration of shafts is **not** to scale. Refer to separate tri-fold insert for a diagram to scale if you prefer to lay parts out on a template.



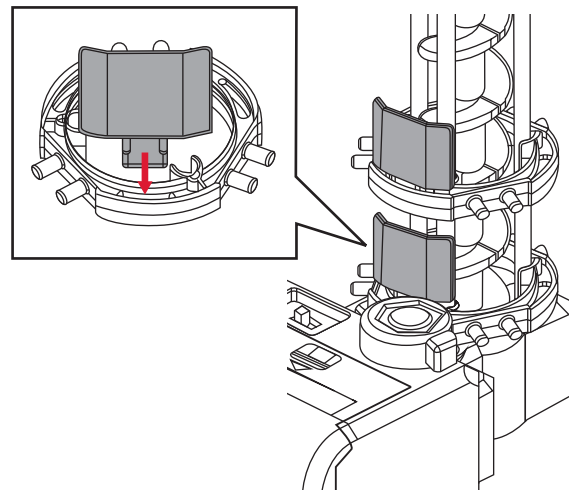
Step 6: Install Elevator Rings with tabs facing up, as shown in red above. Slide each ring from the top down. Place 1 ring flush with the bottom. Place the other 2 at measurements shown measuring from top of the shaft to the center of the ring.



Step 7: Connect one Rail Clip to each Elevator Ring on the side shown above.



Step 8: Place the Elevator Cover onto the top of the elevator assembly.

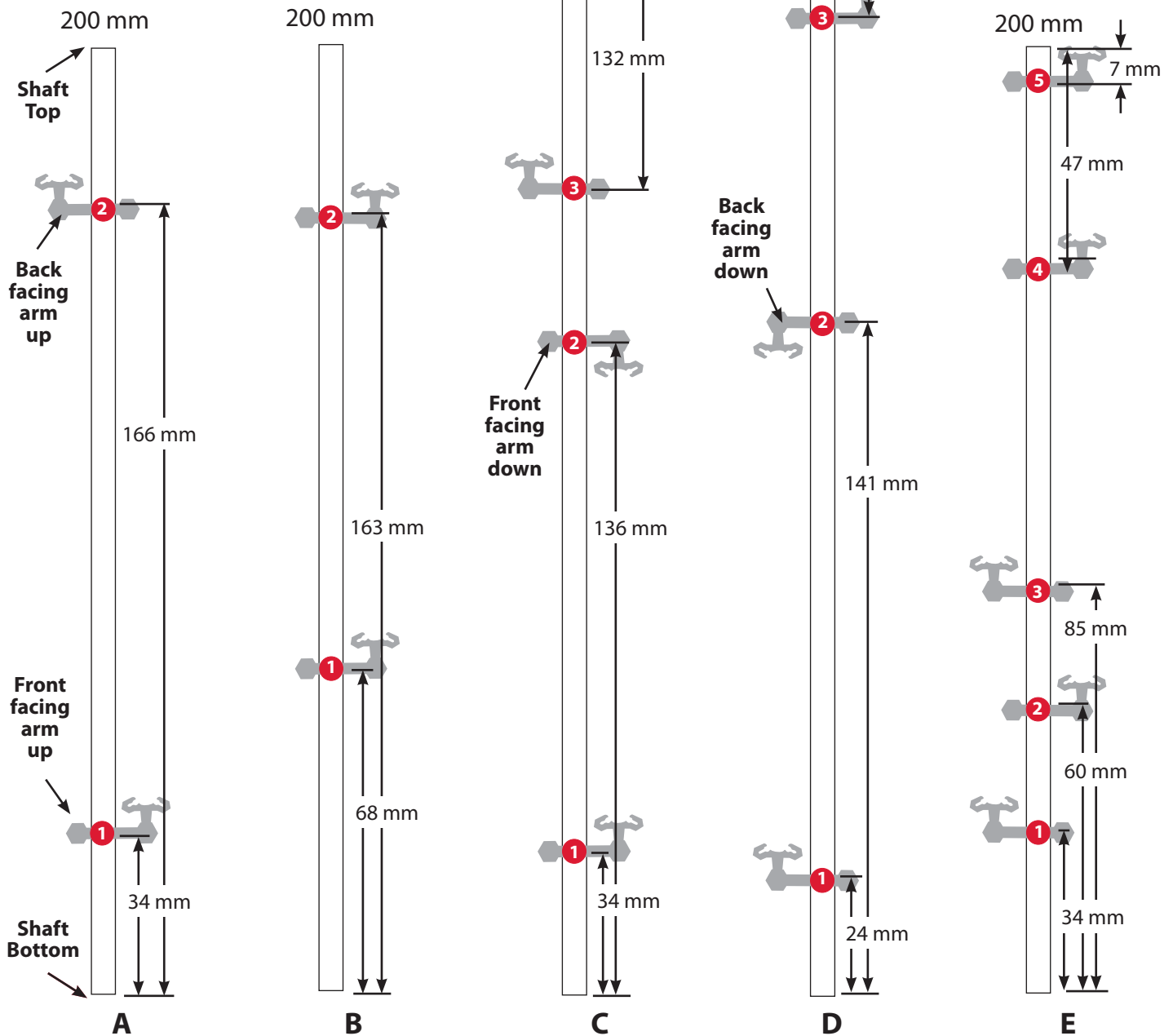


Step 9: Attach an Elevator Guard to each of the three Elevator Rings as shown above. Elevator Guards help prevent the Marble from falling out because it enters fast.

E SHAFT ASSEMBLY & PLACEMENT

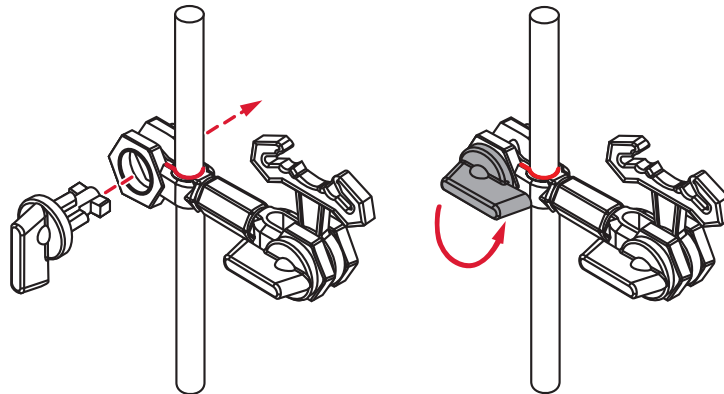
Step 1: Place arms on three 200 mm and two 300 mm shafts according to dimensions show. Note the left and right, up or down orientation of arms. Shafts are shown as if standing up. Measure using ruler either from top of the shaft down or the bottom of the shaft up as indicated. See illustration on next page for arm attachment instructions.

Diagram is not to scale. Use tri-fold insert for an actual size diagram.

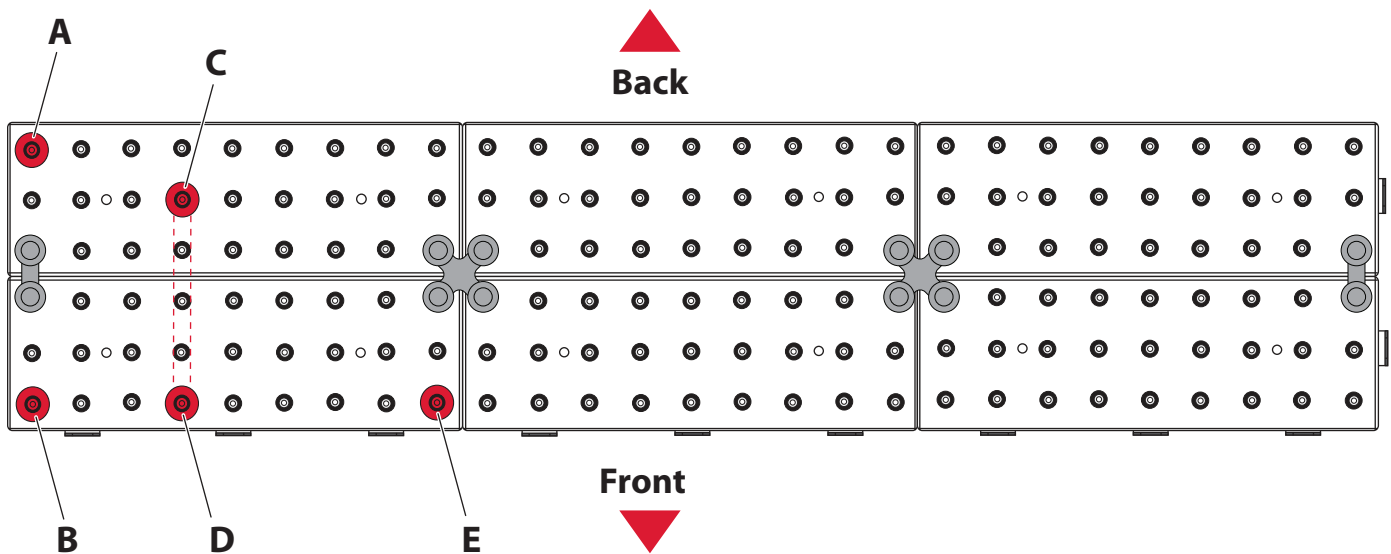


Arm attachment:

Rotate position of arm to match left, right, up, down orientation shown on diagram. Attach to shaft by slightly pulling apart the open arm and inserting shaft. Then insert an Arm Lock and turn to lock in place as shown below. Note: if you incorrectly used an Arm Holder A piece instead of an Arm Holder B piece, the shaft will not fit. See page 5 for the difference and how to correctly assemble the arms.

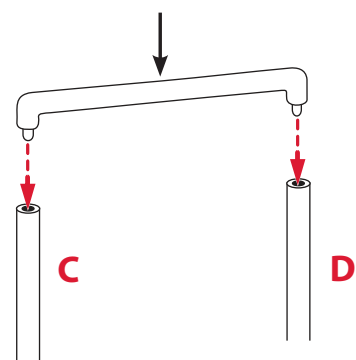


Step 2: Insert shafts A-E (bottom first) into the base assembly matching the shaft letter with the positions shown below. Be sure to press shafts in firmly so they don't rotate easily. Pay attention to back, front, up, down position of arms as shown on diagram.



Step 3: Insert 1 Shaft Connector into the tops of the C and D shafts to lock them in place.

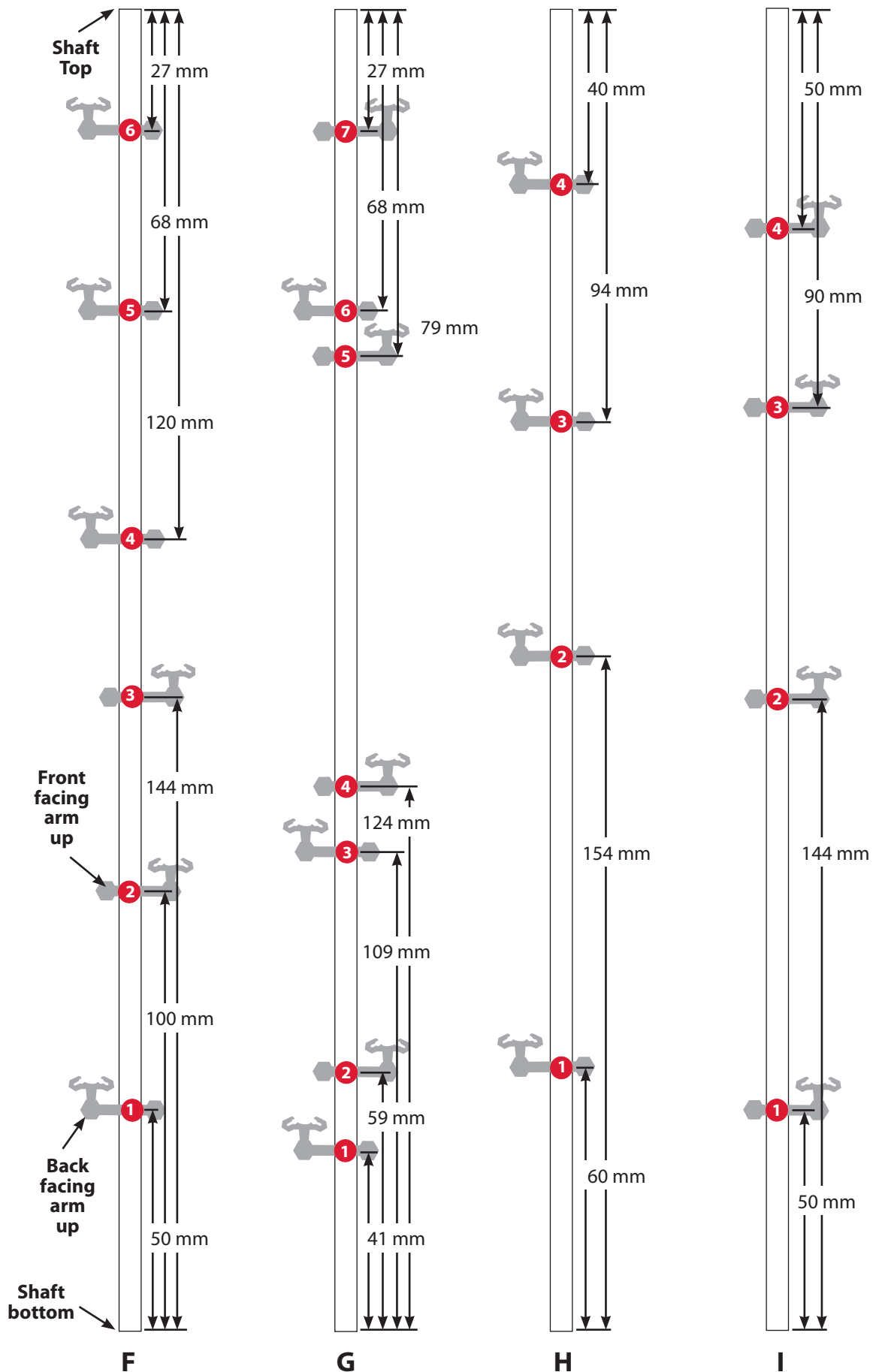
Shaft Connector



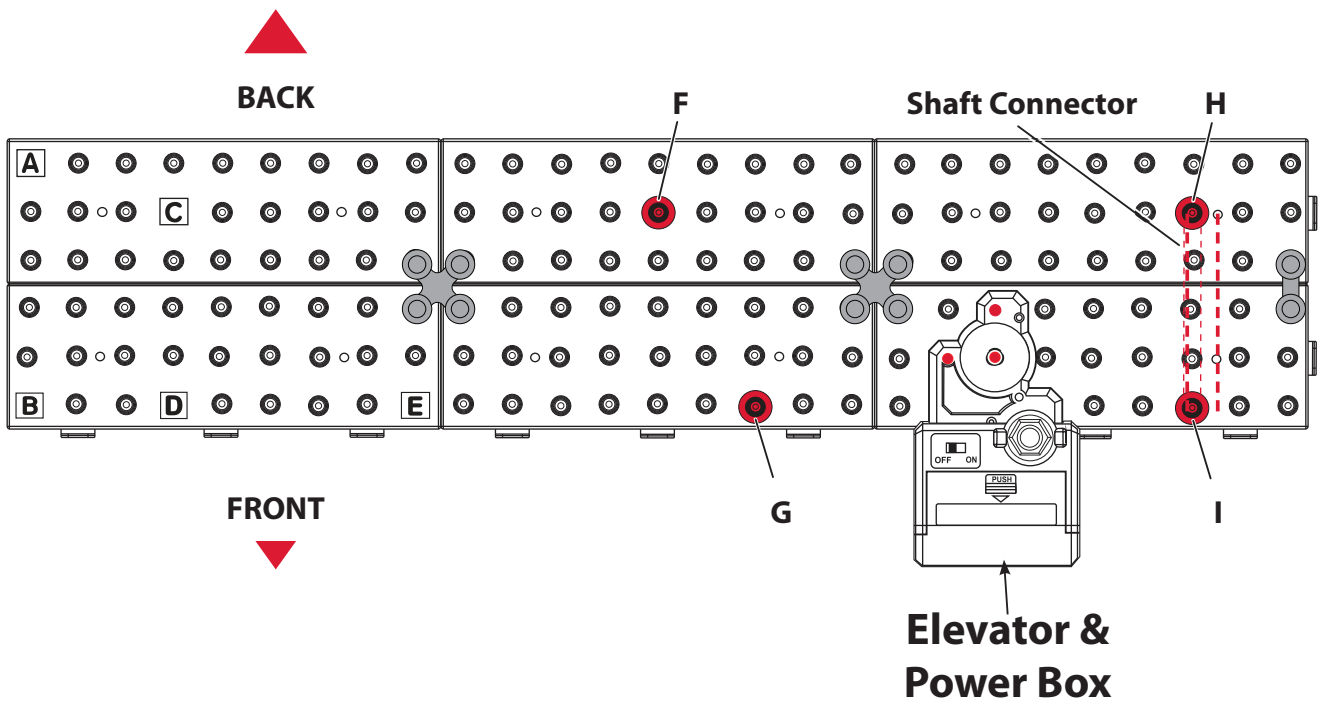
F SHAFT ASSEMBLY & PLACEMENT PART 2, POWER BOX PLACEMENT

Step 1: Place arms on four 300 mm shafts according to dimensions shown. Note the left and right orientation of arms. Shafts are shown as if standing up. Measure using ruler either from top of the shaft down or from the bottom of the shaft up as indicated. See illustration on previous page for how to attach arms.

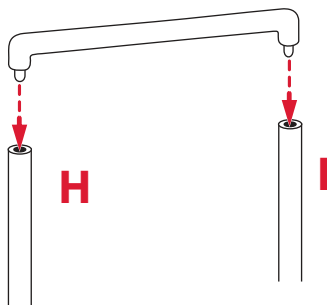
Diagram is not to scale. Use tri-fold insert for an actual size diagram.



Step 2: Insert shafts F-I (bottom first) into the base assembly matching the shaft letter with the positions shown below. Pay attention to back, front, up, down position of arms as shown on diagram.

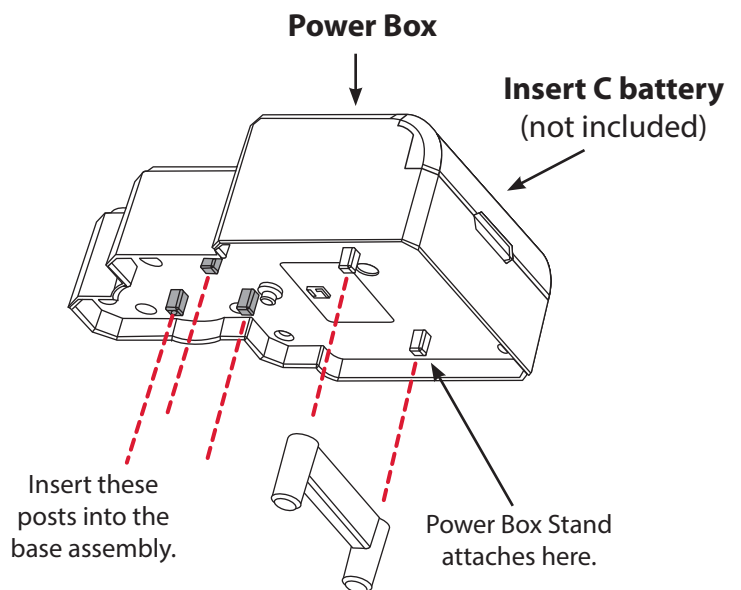


Step 3: Insert 1 Shaft Connector into the tops of the H and I shafts to lock them in place.



Step 4: Insert the Power Box Stand into the bottom of the Power Box on the bottom of the elevator as shown below. Insert C battery (not included) into Power Box battery compartment.

Attach the entire elevator to the base assembly by inserting the three posts in the bottom of the Power Box into the positions shown in the diagram above.

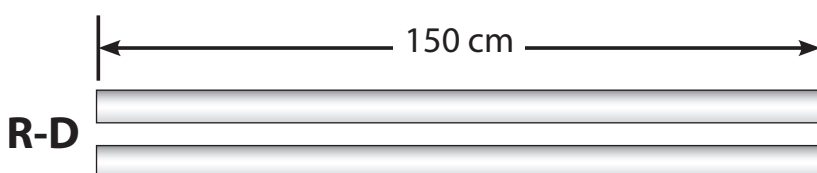
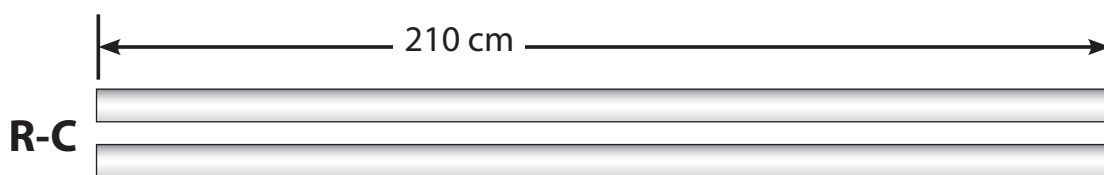
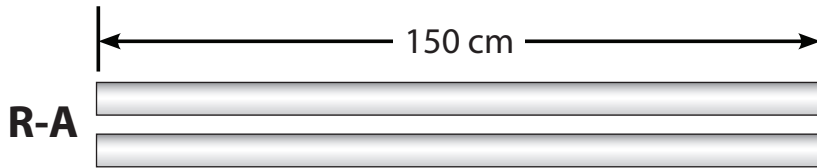


G CUT THE RAILS TO SIZE

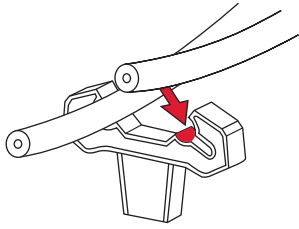
Step 1: Lay out rail on a flat surface. Measure each section and mark the cutting point with a pen.

Step 2: Cut each of the 8 rail sections according to the measurement shown below. Make sure to cut at a 90° angle.

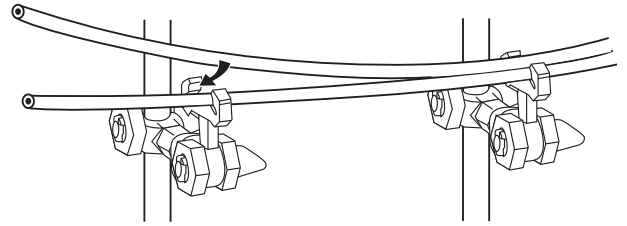
NOTE: All of these rail dimensions include extra rail. They will all need to be cut shorter based on their final placement and positioning. It is easier to position with more rail than you need and then cut a long rail shorter. Illustration of rail lengths is **not to scale**. Please see the included tri-fold with printed ruler for laying the rail out on a template to measure.



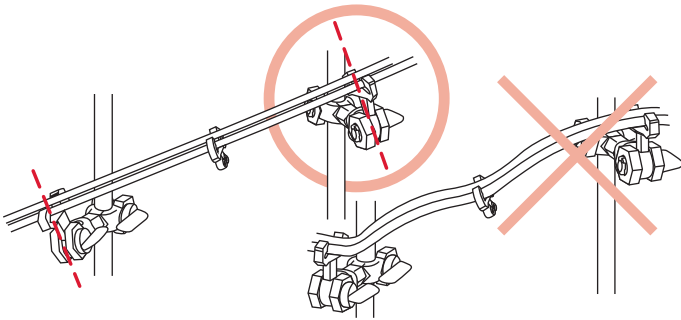
2 ASSEMBLING THE RAILS: READ BEFORE YOU BEGIN



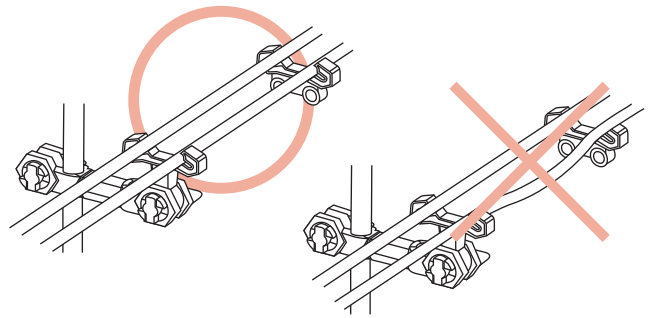
Connecting rails to arms: To install the rails, press them into the arm until you hear a click. **Remove rails to reposition by pulling to center. DO NOT SLIDE RAILS while still locked in arms or you may break the arms.**



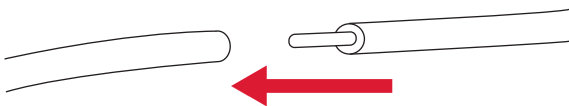
Rail side: When installing rails, make sure you keep each rail always on the inner side or always on the outer side of each arm as you install. Crossing over will prevent the Marble from going down the track.



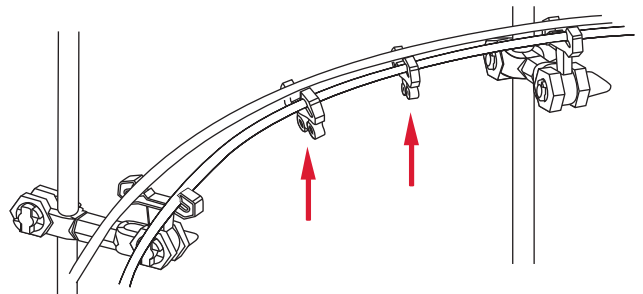
Angling the Arms: Rotate arms on shafts and adjust the angle of the arms to match the incline the rails will travel along. See diagrams for rotation positions.



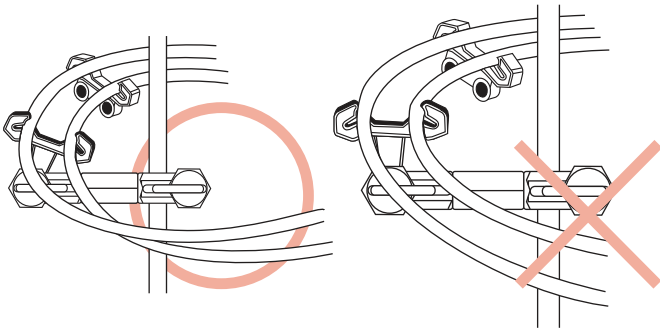
Smooth rails for efficient travel: Make sure the rails connect smoothly and are free of any bumps, twists, or kinks.



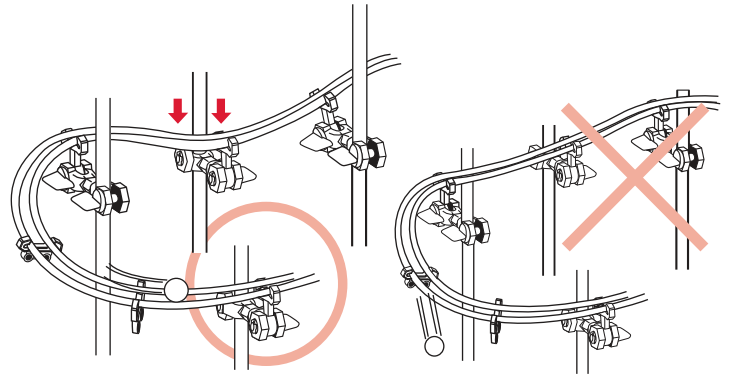
Rail joining: To join to pieces together, use Rail Couplings. You may also use the Rail Couplings to create custom designs using different lengths.



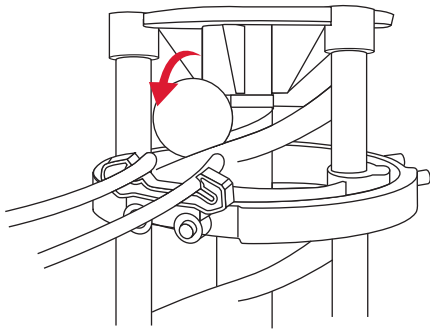
Rail stability: To maintain stability on longer track segments, attach Rail Clips between arms, usually one between each set of arms, but use as needed. Twisting Rail Clips also changes the angle of the rails.



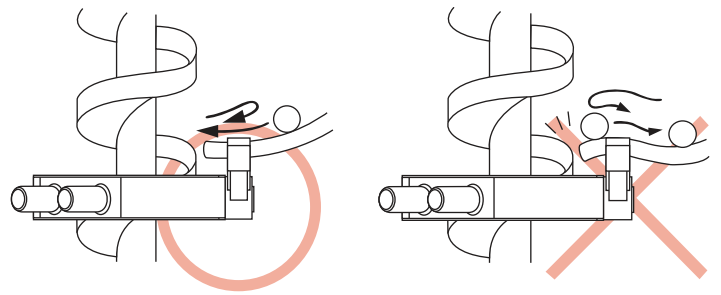
Corner shape: To help the Marble maintain speed, shape corner rails like the above, not like a straight section. You may need to use Rail Clips to create the curve.



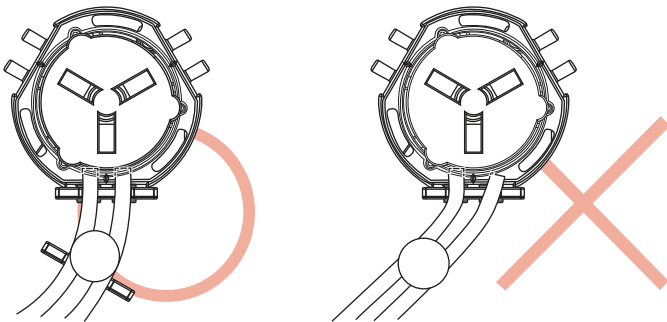
Slow before corners: Reduce Marble speed before taking a corner by lowering the rail track via the arm.



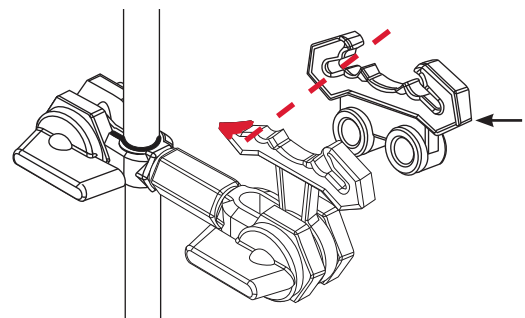
Elevator exit: When installing the elevator exit rails, pull the rails close to the Elevator Helix to ensure the Marble enters the roller coaster smoothly.



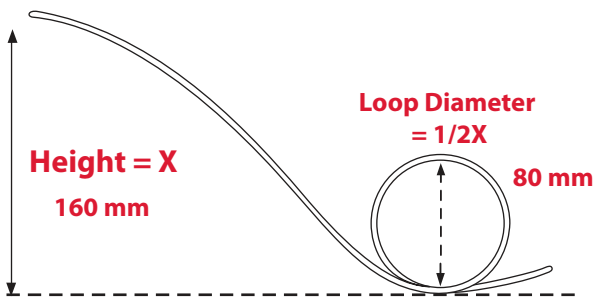
Elevator entry: Make sure the rails enter the elevator straight and aren't too long, or angled, or the Marble will hit the elevator shaft and bounce out.



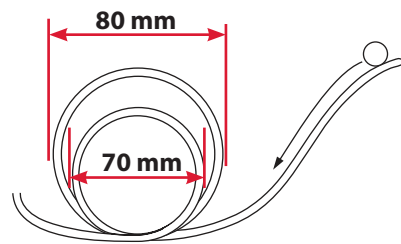
Elevator entry angle: Make sure the rails are not overly angled upon entry to the elevator. You may need to place a Rail Clip before the entry to straighten.



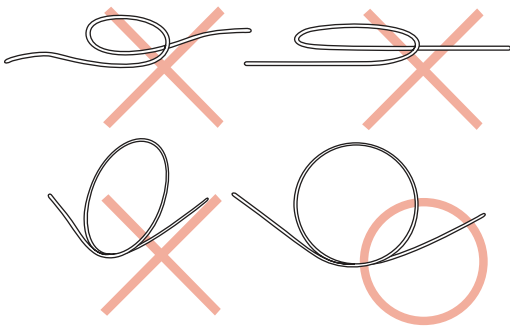
Broken Arm Clip: If you end up accidentally breaking an arm clip, replace it with a spare. If you have no more spares, place a Rail Clip before or after it at the same angle as the Arm Clip.



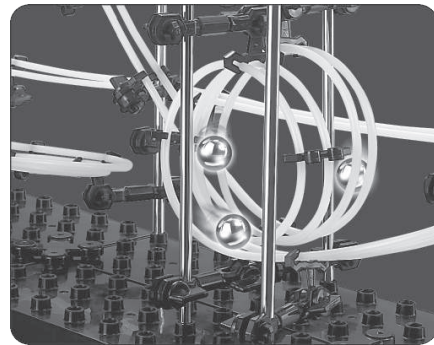
Building the space loop: For the loop to work, the diameter of the first, larger, loop has to be 1/2 the height of the fall. The first loop should be 80 mm in diameter.



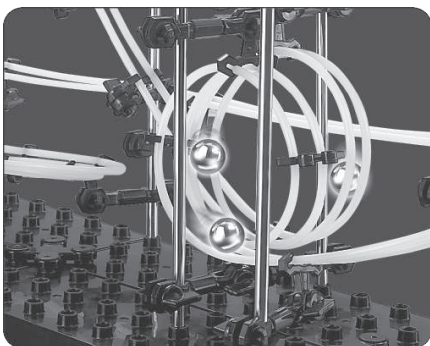
2nd loop size is smaller: The second loop must be smaller than the first loop to keep the Marble running. It is 70 mm in diameter. Measure with a ruler.



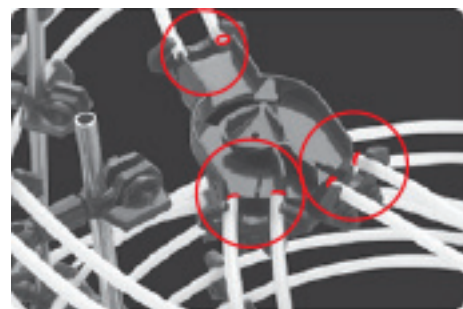
Loop shape: Make sure your loops are a nice even circle and are fully upright. Use Rail Clips to help maintain shape.



Close up of finished space loops: Note the vertical alignment, shape, and the two different loop sizes. Also note the placement of Rail Clips.



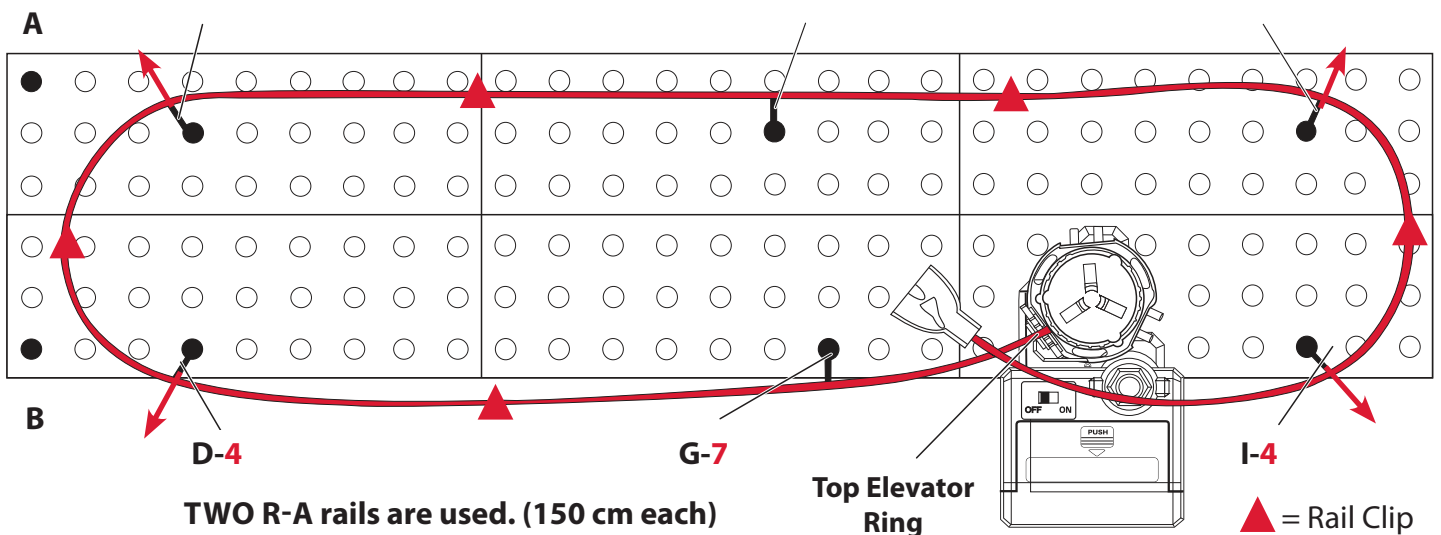
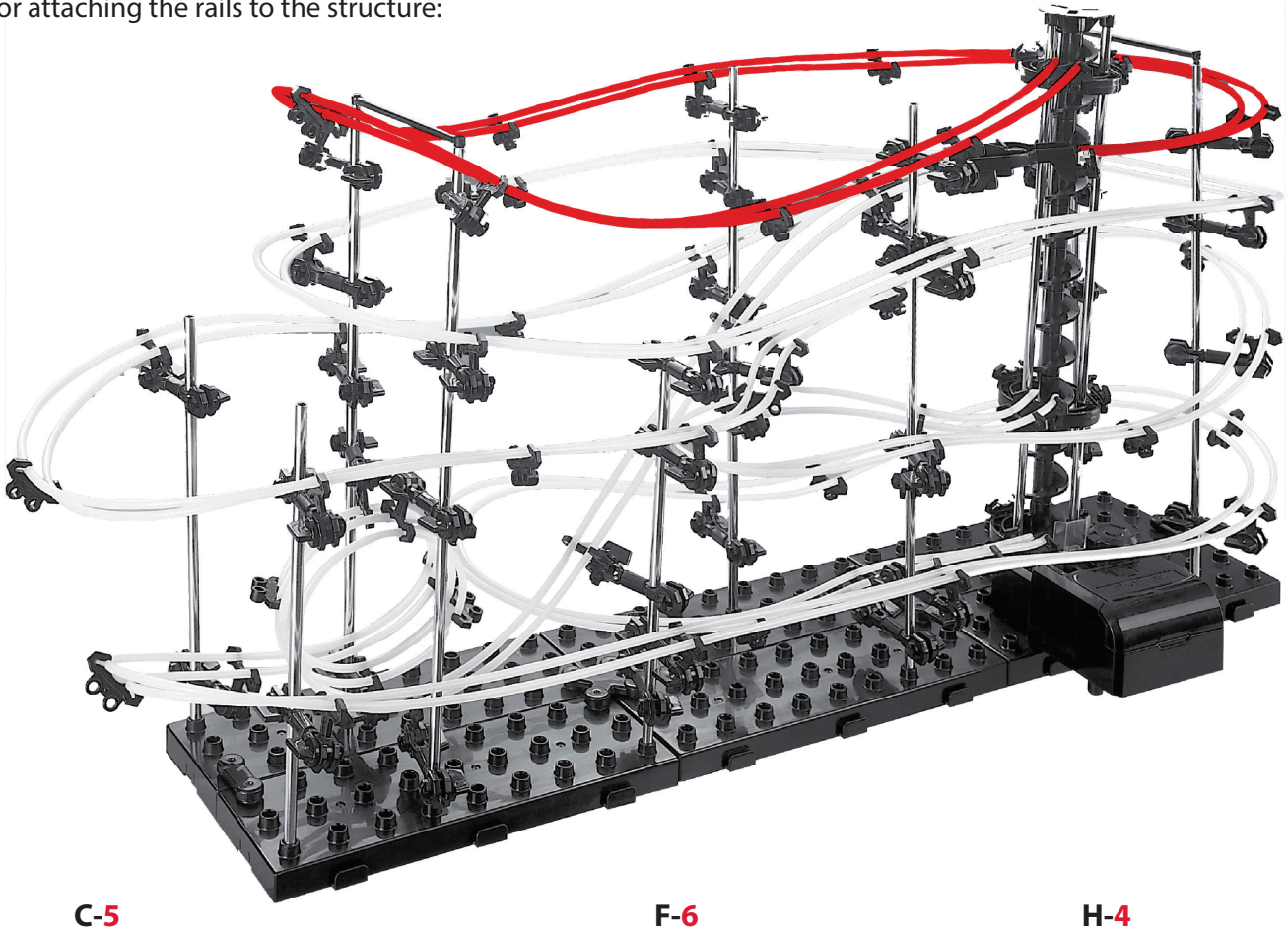
Close up of finished space loops: Note the vertical alignment, shape, and the two different loop sizes. Also note the placement of Rail Clips.



Rails entering Rail Splitter: Trim the rails at 90° and make sure they are not longer than shown in the image.

A CONNECT TWO R-A RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



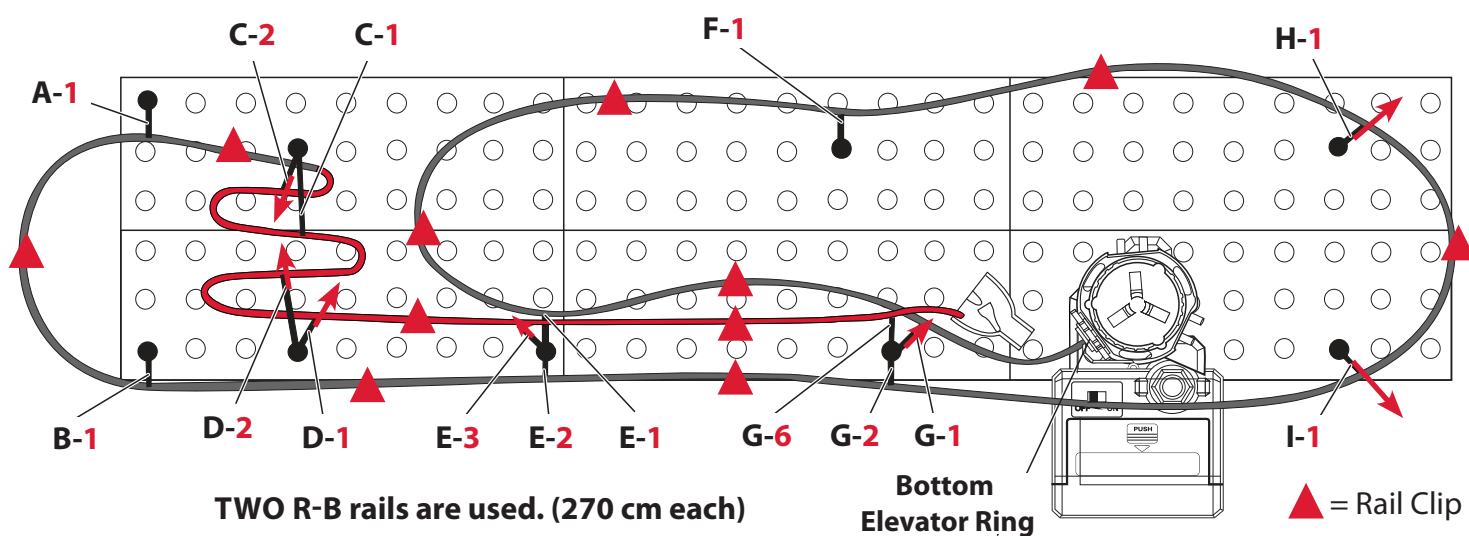
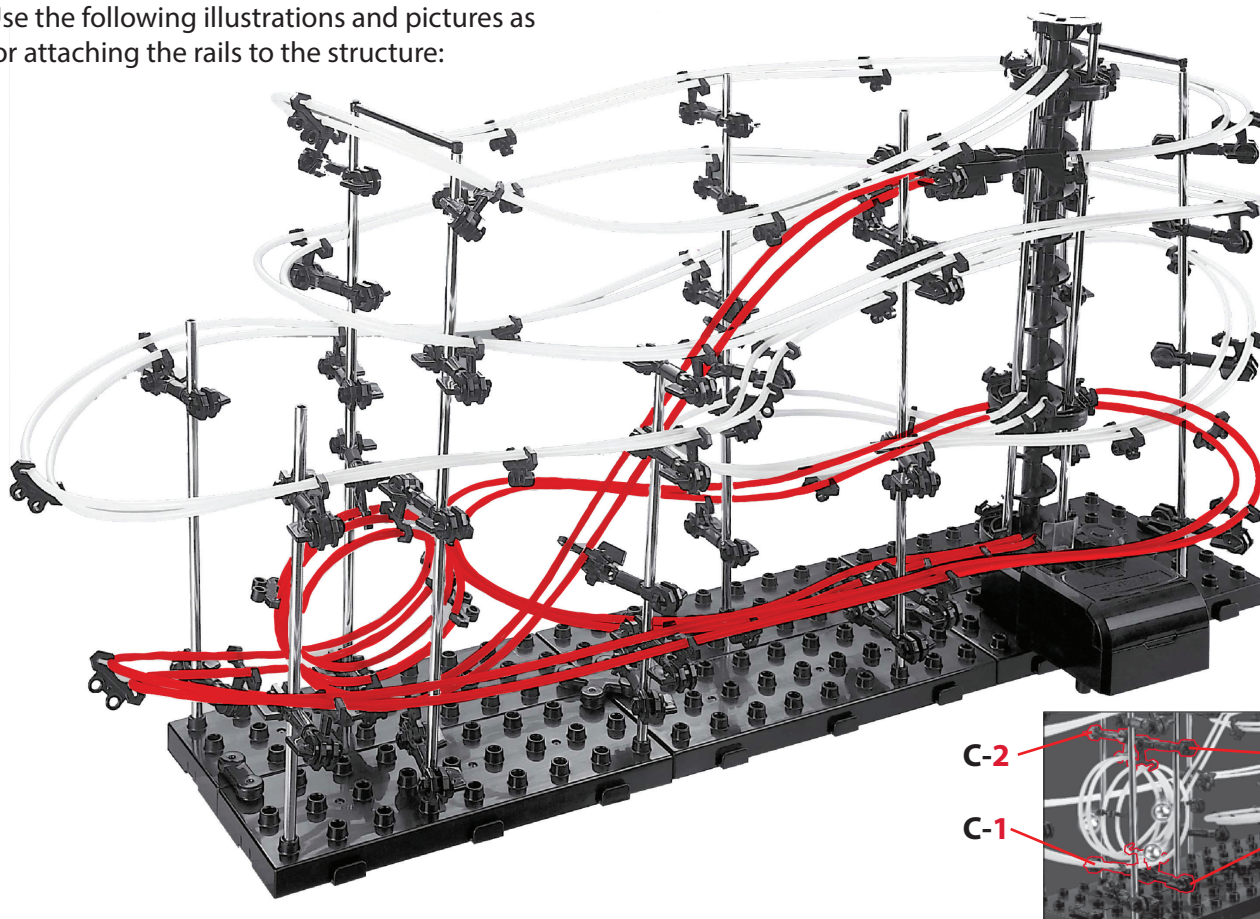
Step 1: Rotate one rail arm on C, D, H, and I shafts to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **For Example, D-4 is the 4th arm from the bottom on the D shaft.**

Step 2: Connect two R-A rails starting at the top ring on the elevator shaft and going left, connect at G-7, D-4, C-5, F-6, H-4, I-4 and then connecting the end into the back side of the Rail Splitter. Rail Splitter will hang freely and there will be extra rail at the end. Leave extra rail until the end of Step 3.

Step 3: Starting at the elevator shaft, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you end at the Rail Splitter. After making sure the rails look correct, cut excess rail using scissors. Refer to photo above for how the final cuts should look.

B CONNECT TWO R-B RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



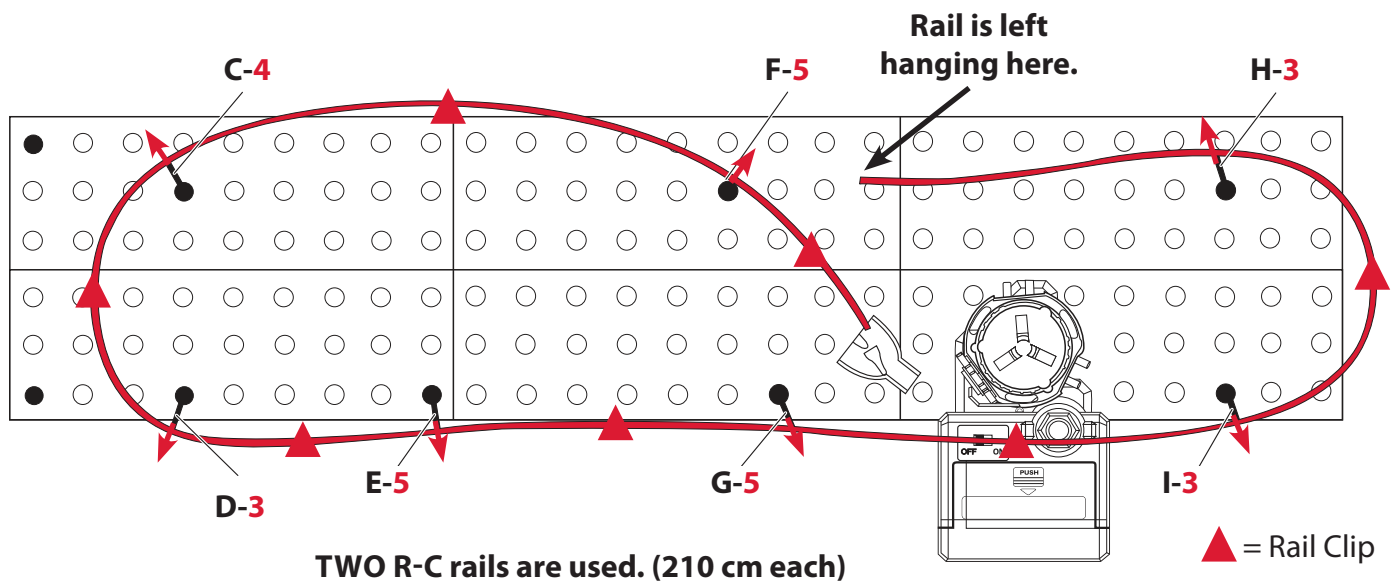
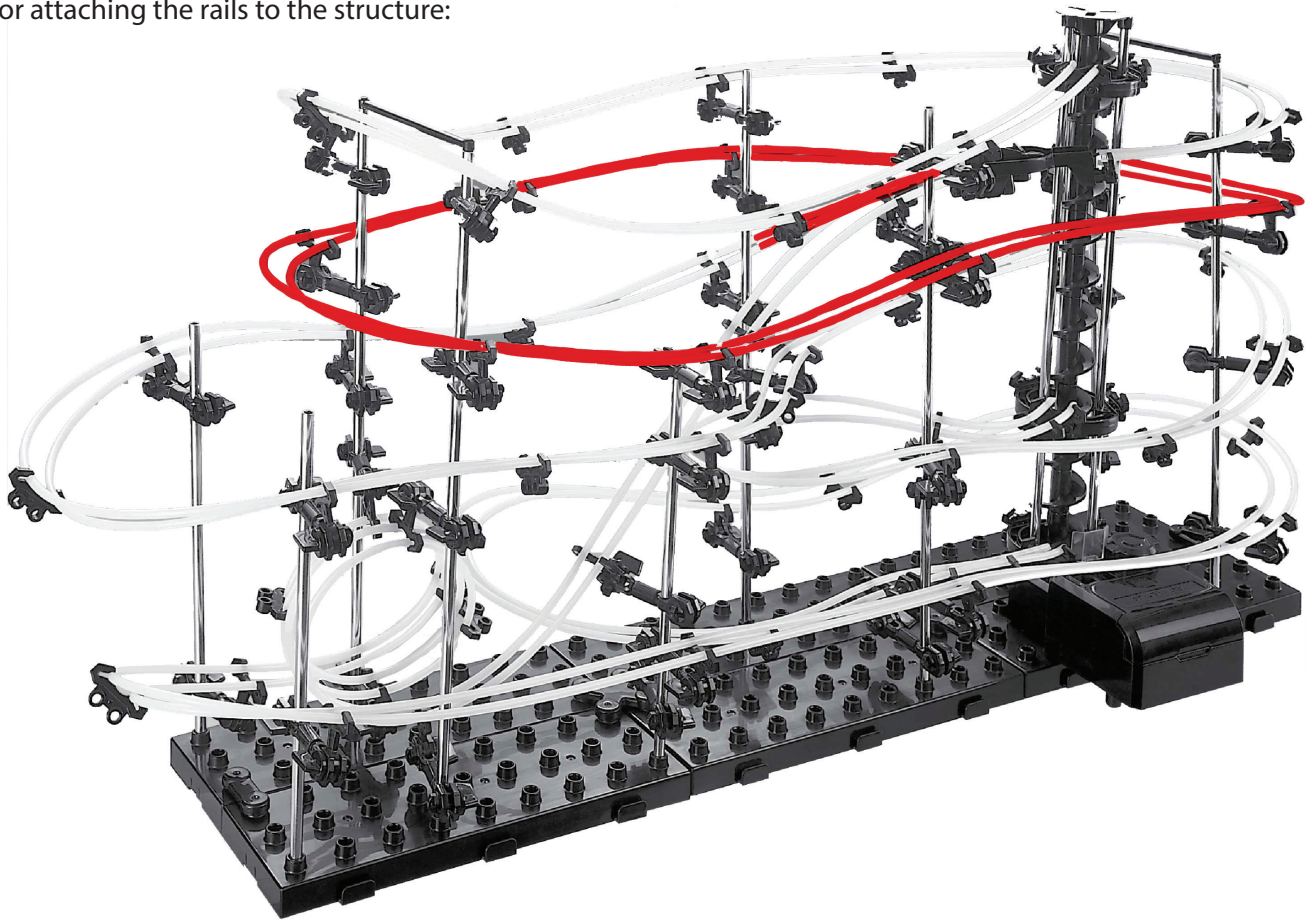
Step 4: Rotate one rail arm on C-2, D-1, D-2, E-2, G-2, H-1, and I-1 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **Example: E-3 is the 3rd arm from bottom on the E shaft.**

Step 5: Connect two R-B rails starting at the bottom ring on the elevator shaft and going left, connect at G-1, G-2, E-1, F-1, H-1, I-1, G-2, E-2, B-1, A-1. Space loop begins at C-2 and should be 80 mm in diameter to C-1, at D-2 it shrinks to 70 mm in diameter (see page 14 loop instructions) through D-1. After loop continue to E-3, G-6 and then connecting the end into the back side of the Rail Splitter. There will be extra rail at the end. Leave extra rail until the end of Step 3.

Step 6: Starting at the elevator shaft, straighten rails and place a Rail Clip in between each Shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you end at the Rail Splitter. After making sure the rails look correct, cut excess rail using scissors. Refer to photo above for how the final cuts should look.

C CONNECT TWO R-C RAILS

Use the following illustrations and pictures for attaching the rails to the structure:



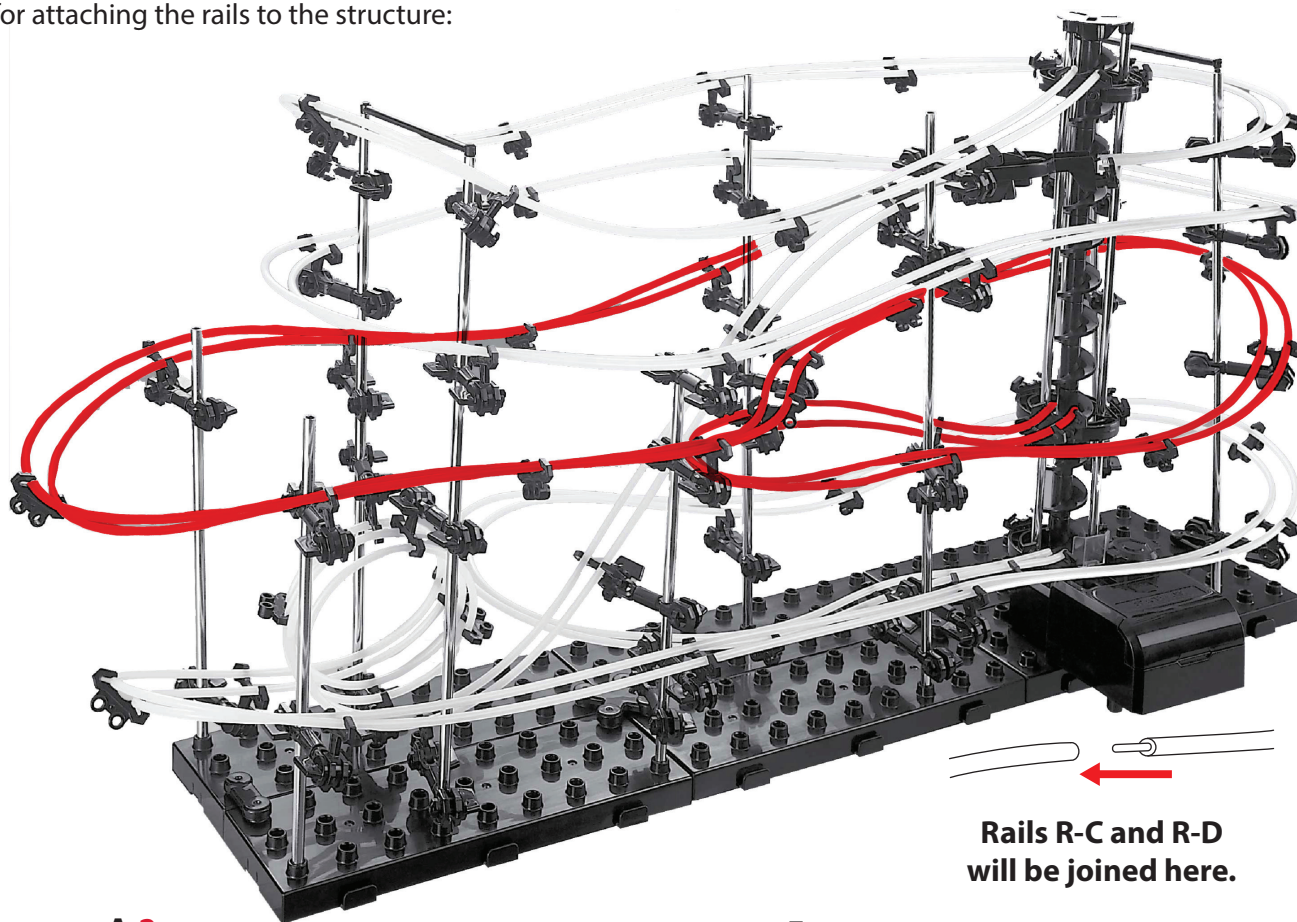
Step 7: Rotate one rail arm on C-4, D-3, E-5, G-5, I-3, and H-3, and F-5 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **D-3 is the 3rd arm from the bottom on the D shaft.**

Step 8: Connect two R-C rails starting at the right front side of the Rail Splitter and going to F-5, C-4, D-3, E-5, G-5, I-3-H-3 and leaving the rails hanging as shown. These will be joined with the next set of rails. There will be extra rail at the end. Leave extra rail until the end of Step 12.

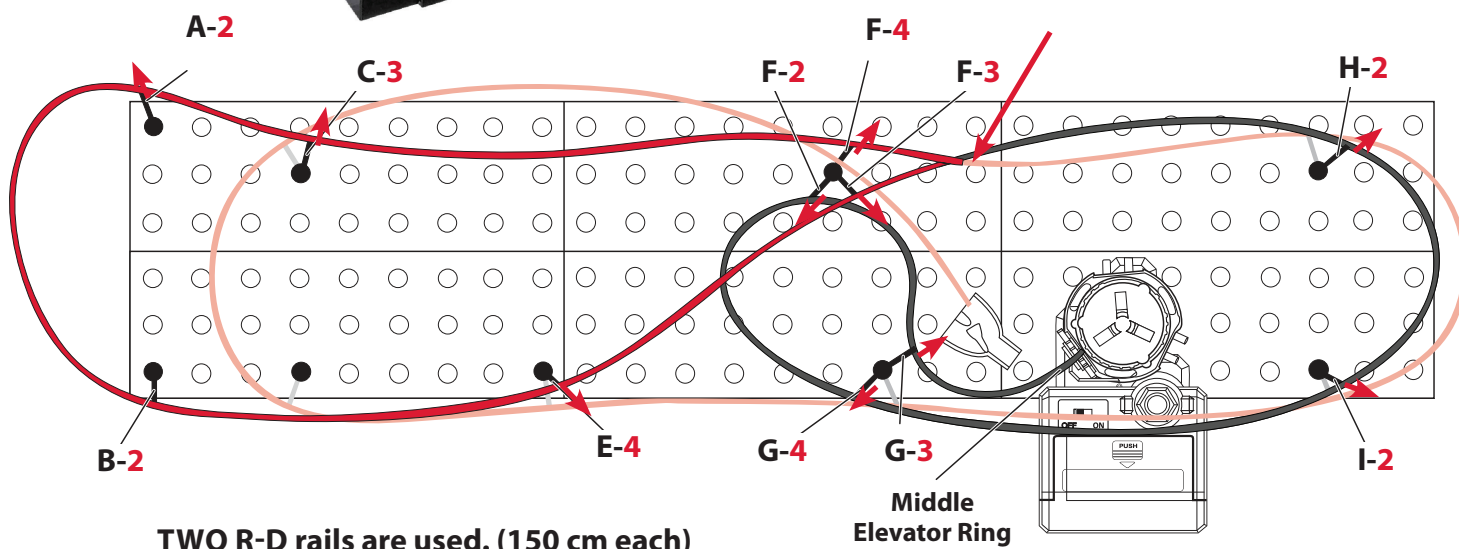
Step 9: Starting at Rail Splitter, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced as shown by the red triangles above. Go from section to section until you finish between I-3 and H-3. Leave excess rail hanging.

D CONNECT TWO R-D RAILS AND JOIN WITH TWO R-C RAILS

Use the following illustrations and pictures as for attaching the rails to the structure:



Rails R-C and R-D will be joined here.



TWO R-D rails are used. (150 cm each)

Middle Elevator Ring

Step 10: Rotate one rail arm on A-2, C-3, F-2, F-4, F-3, H-2, I-2, G-3, G-4, and E-4 to match the red arrows shown above. The arm number is shown above and is counted from the bottom up. **D-3 is the 3rd arm from the bottom on the D shaft.**

Step 11: Connect two R-D rails starting at the middle elevator ring and going to G-3, F-3, F-2, G-4, I-2, H-2, E-4, B-2, A-2, C-3, F-4, and leave hanging at joint until end of Step 12. There will be extra rail at the end. Leave extra at this point.

Step 12: Starting at middle elevator ring, straighten rails and place a Rail Clip in between each shaft to keep rails evenly spaced (red triangles are not shown to help with visual clarity of the rails.) Go from section to section until you reach where the two sets of rails are hanging. Start by cutting one set of the rails even with each other. Then overlap the other set and cut so they will join evenly. Insert the rail connectors into the ends of one set, then join them with the other set.



Seaich Corporation

1910 West 1040 South
Salt Lake City, UT 84104
(833) 732-4242
orders@seaich.com



Spacerails LLC
www.spacerails.com