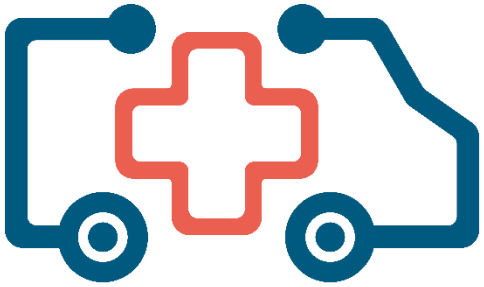


CRASH SAVERS VR

Hemostatic Foley Simulator

Step by Step Building Guide

Table of contents

1.0 - Material shopping list

Product	Quantity	Price	Notes
PVC heat pipe ½”	4 meters	$7.00	See manual for the different sizes.
PVC elbow 90 degrees ½”	8	$4.50	
PVC T joint	5	$3.30	
PVC 4”	1 meter	$3.00	See manual for the different sizes.
Adapter ½”-¼”	2	$5.00	
Latex plastic hose	1	$4.00	
Teflon tape	1	$0.25	
Water pump (Fumigator)	1	$15.00	
Plastic water bottle	1	$1.50	
Modeling Balloon	1	$1.00	
Plastic twist ties bag (10 units)	1	$1.00	
	Total	**$45.55**	

1.1 - Build the system

1.2 - Tools and materials

In this section you will find a list and description of all the tools and materials needed to build the system. Note that most of the items listed below can be found at home or in your local store.

1.2.1 - Tools needed

The following list shows the tools that are needed to build the system. We strongly suggest for you to gather all the tools before starting to build, this will optimize time and prevent any delay in the process.

Tools list:

Hand saw	400 - grit sandpaper
Drill	Measuring tape
Drill bits (sizes 1/8'', 1/2')	C-clamp
Philips screwdrivers (various sizes)	Wrenches
Pliers	Rotary tool (Dremel)

Additional notes:

- It is important to note that not all the tools listed below are completely necessary, but if you have access to them, the process will be easier and precise. The tools marked in **green** are the ones that are completely necessary, and the ones marked in **red** are not required, but it will help you get a better result.

1.2.2 - Materials needed

The following list shows all the materials that are needed to build the system. It is essential for you to get everything listed below before you start building the system.

Materials list:

- PVC glue
- PVC pipe (4'')
- Heat pipe ½"
- Plastic twist ties
- Teflon
- Ballon ½"
- PVC T joint
- PVC elbow 90 degrees joint
- Adapter ½"-¼"
- Hose 5mm external diameter

Materials

Now that you are familiarized with the code of the different pieces and that you have the materials, it is time to get them ready. Below you can find different tables with a list of the pieces needed.

Code Letter	Type	Measures (cm)
P1	PVC heat pipe ½"	23.00
P2	PVC heat pipe ½"	36.00
P3	PVC heat pipe ½"	32.00
P4	PVC heat pipe ½"	12.50
P5	PVC heat pipe ½"	36.00
P6	PVC heat pipe ½"	15.00
P7	PVC heat pipe ½"	8.00
J1	PVC T joint heat pipe ½"	
J2	PVC elbow 90 degrees joint heat pipe ½"	
A1	Adapter ½"-¼"	
H	Hose 5mm	

PVC	PVC pipe (4’’)	20.00
B	Modeling Balloon ½”	

You can find all the materials needed to build the mechanism in the box provided with this manual. In case you don’t have access to the materials box, you can use the url provided below to access diagrams to the wood slices so that you can cut them with your carpenter or at home if you have the right tools.

1.3 - Build the system

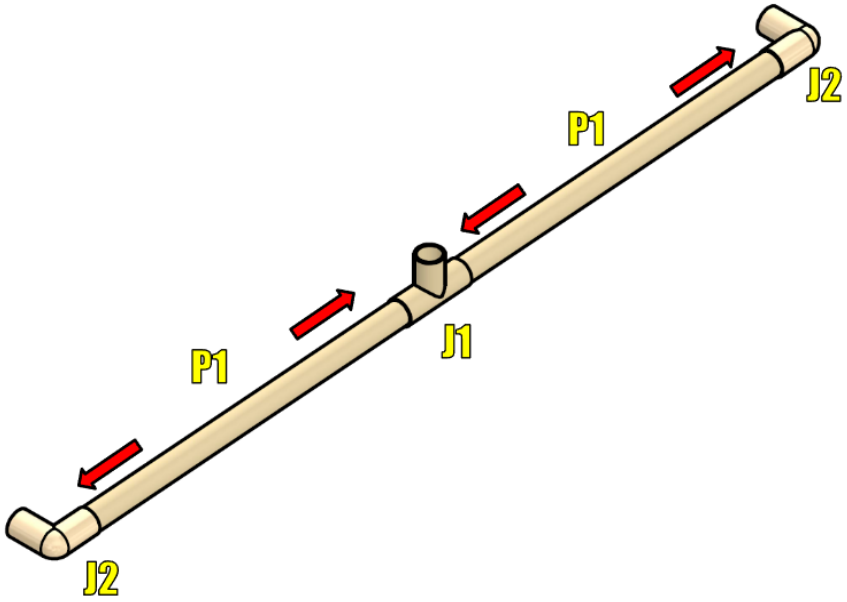
Following up you can find a set of images that show in detail the step by step process to build the mechanism.

Additional notes:

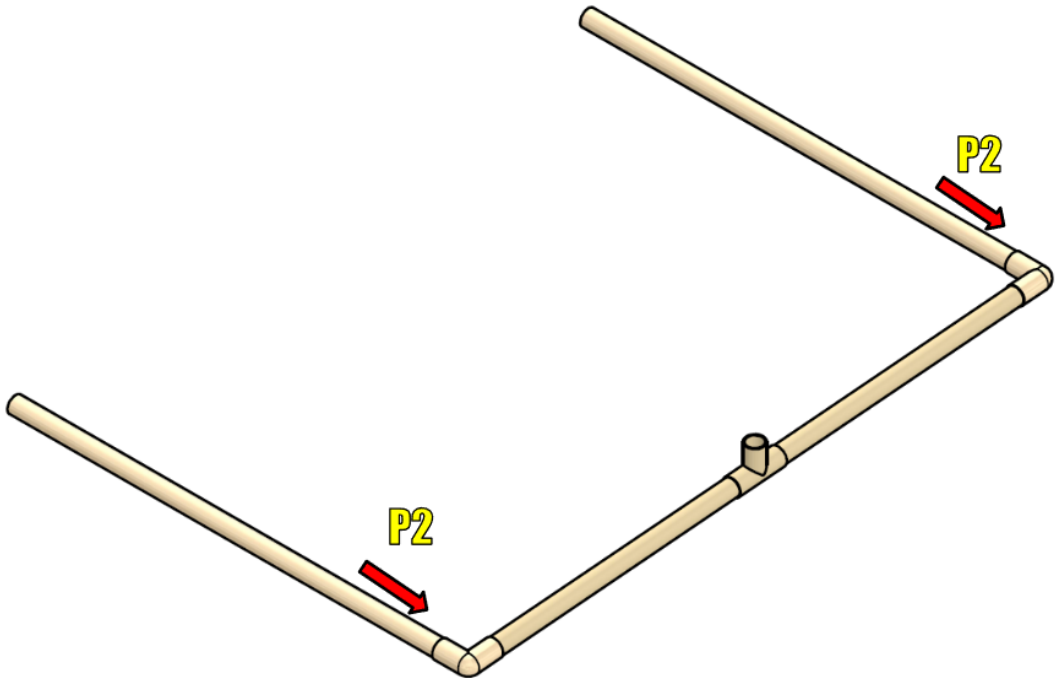
- We recommend using safety glasses, safety gown and gloves to manipulate these tools and materials.

1.3.1 - Building the support

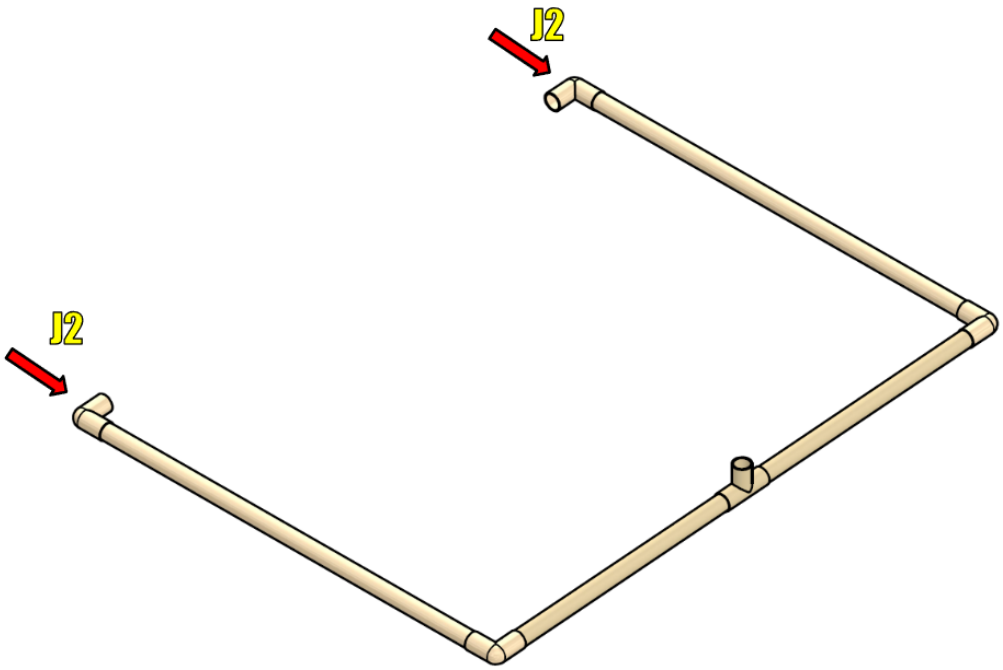
Step 1



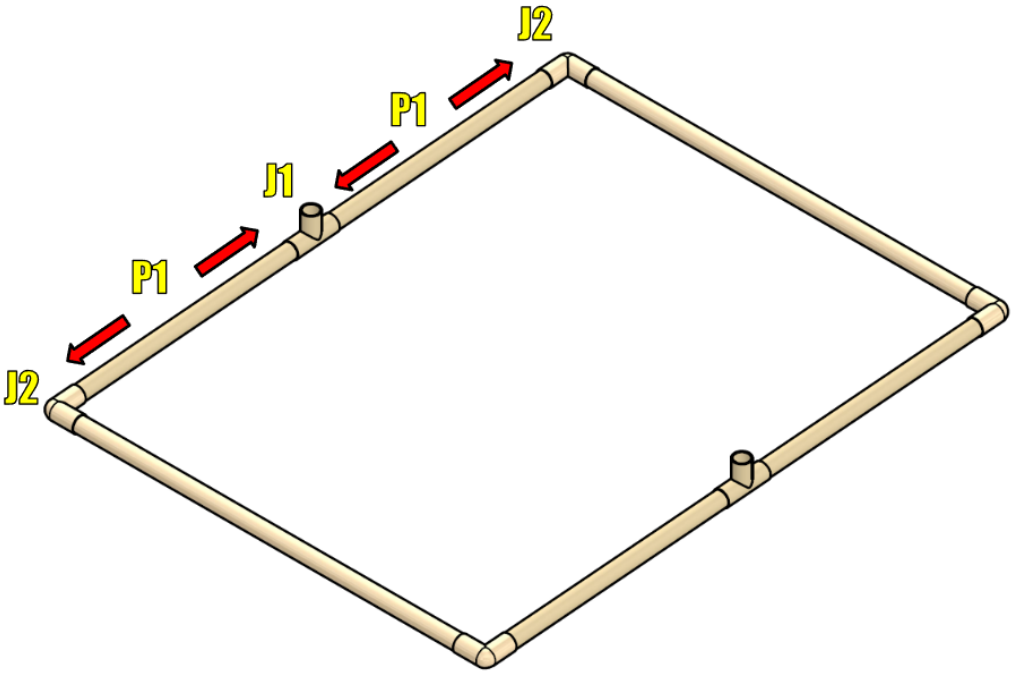
Step 2



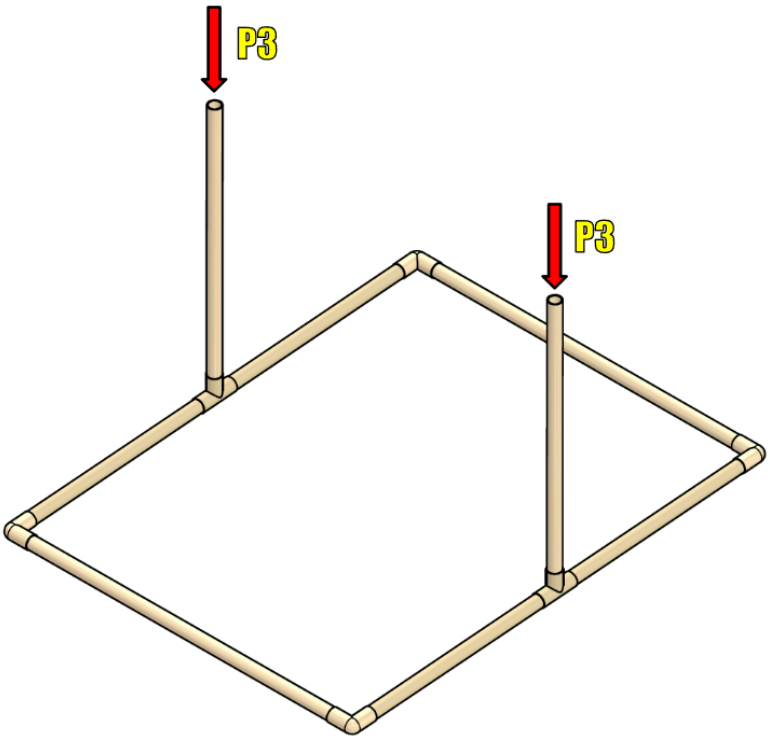
Step 3



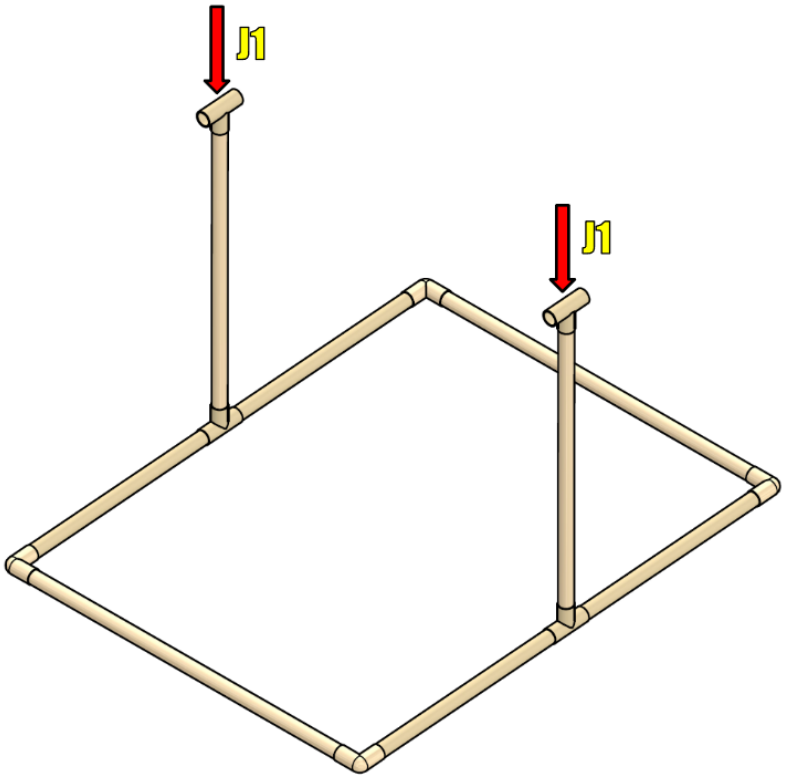
Step 4



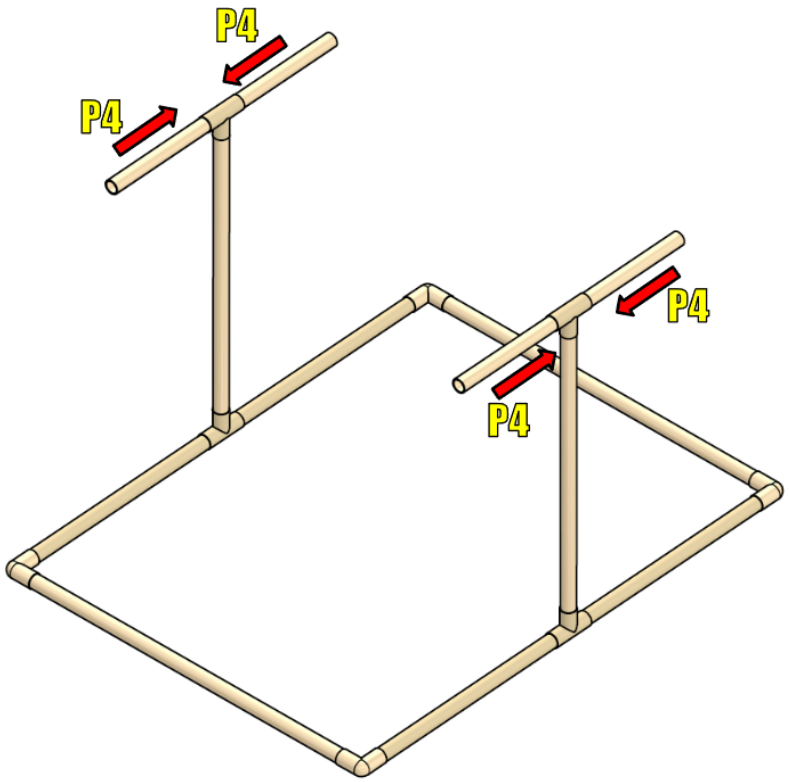
Step 5



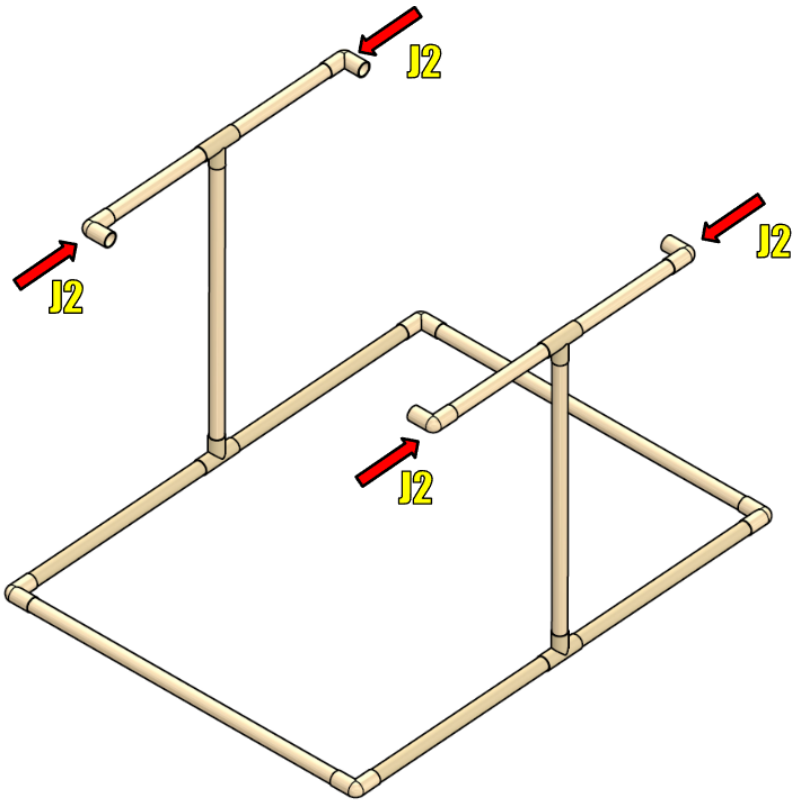
Step 6



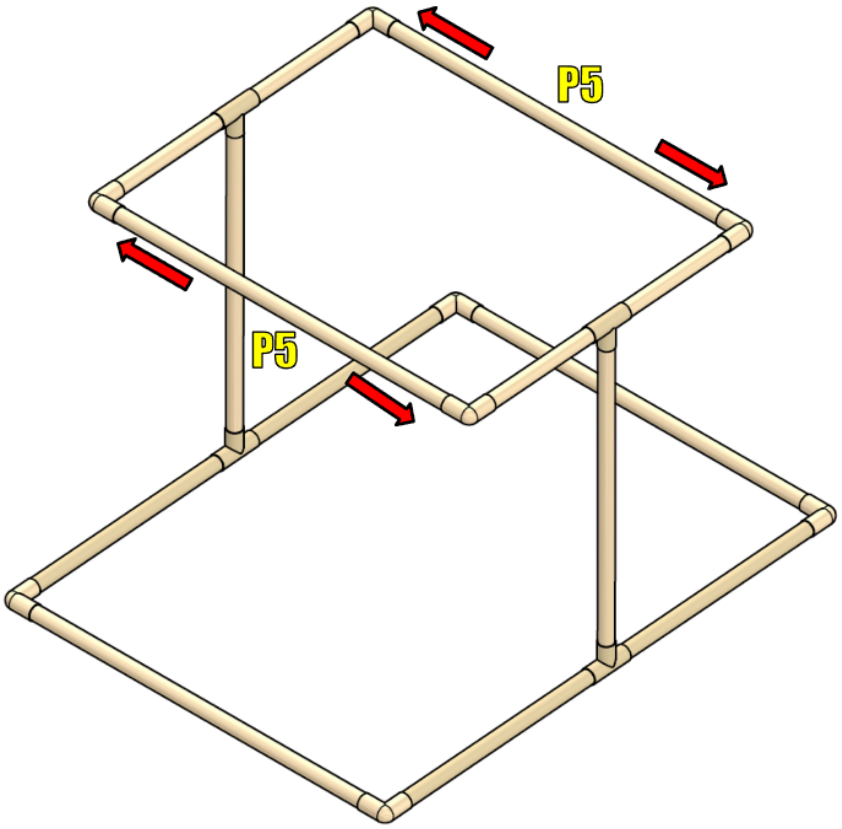
Step 7



Step 8

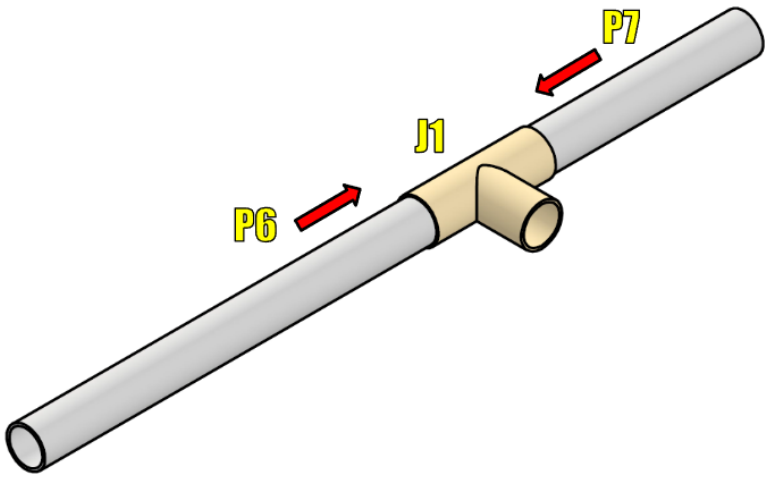


Step 9

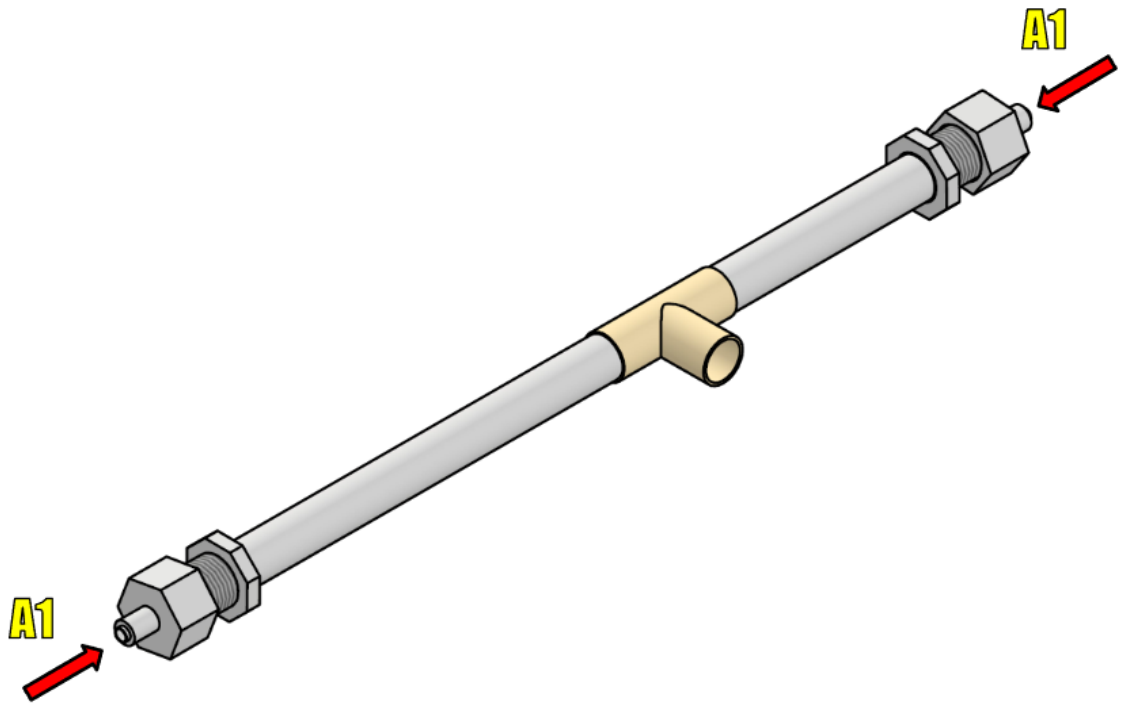


1.3.2 - Mechanism building

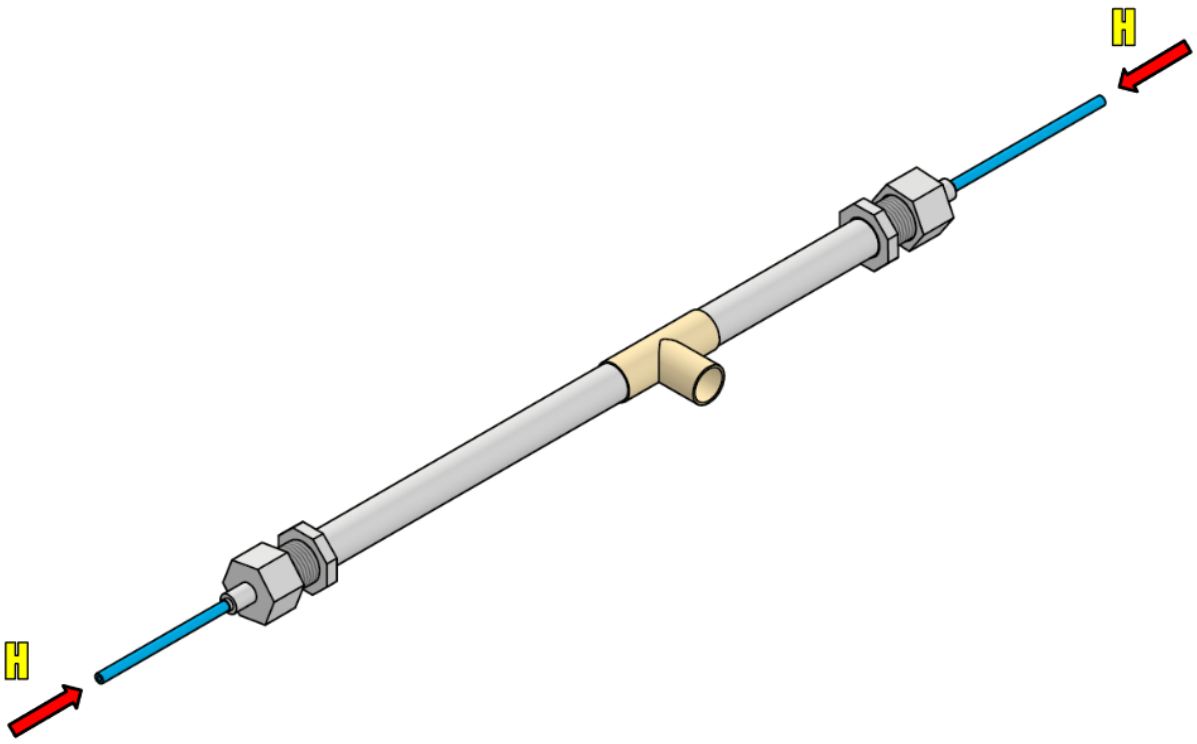
Step 1



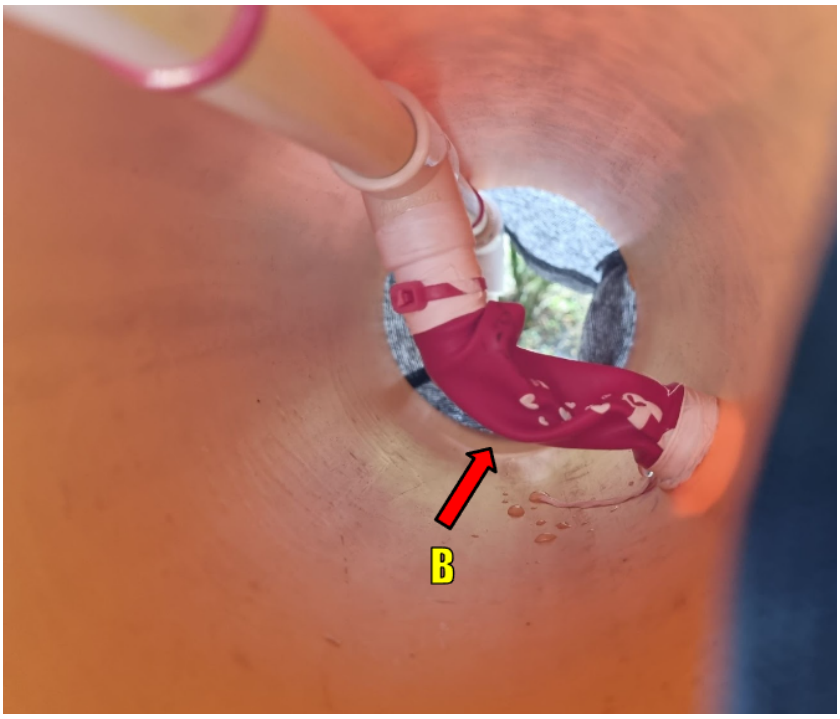
Step 2

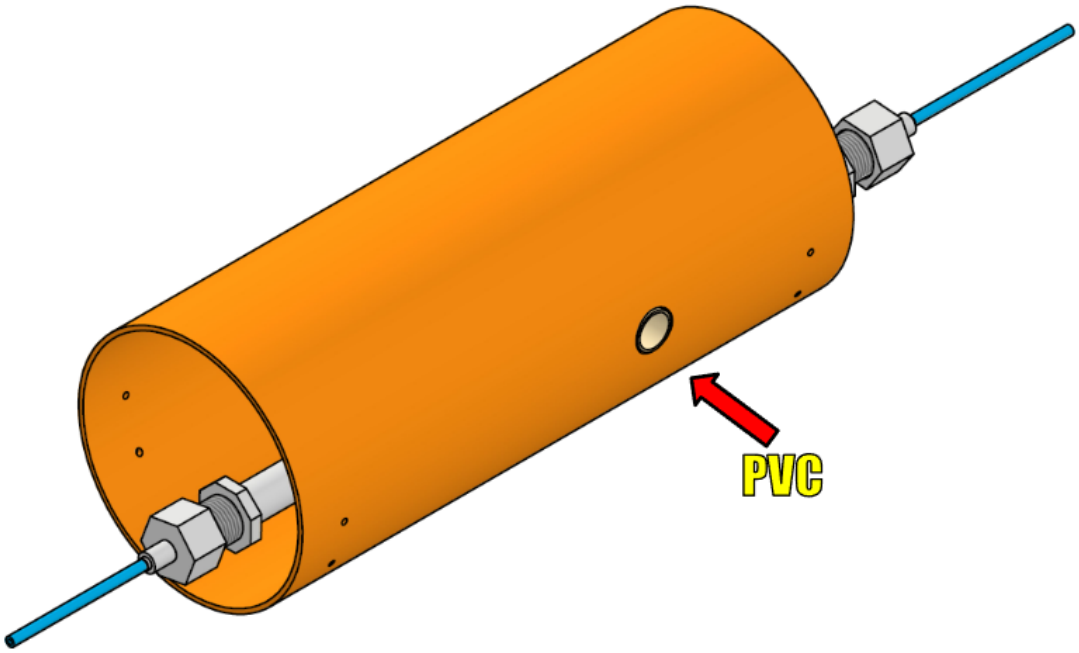


Step 3

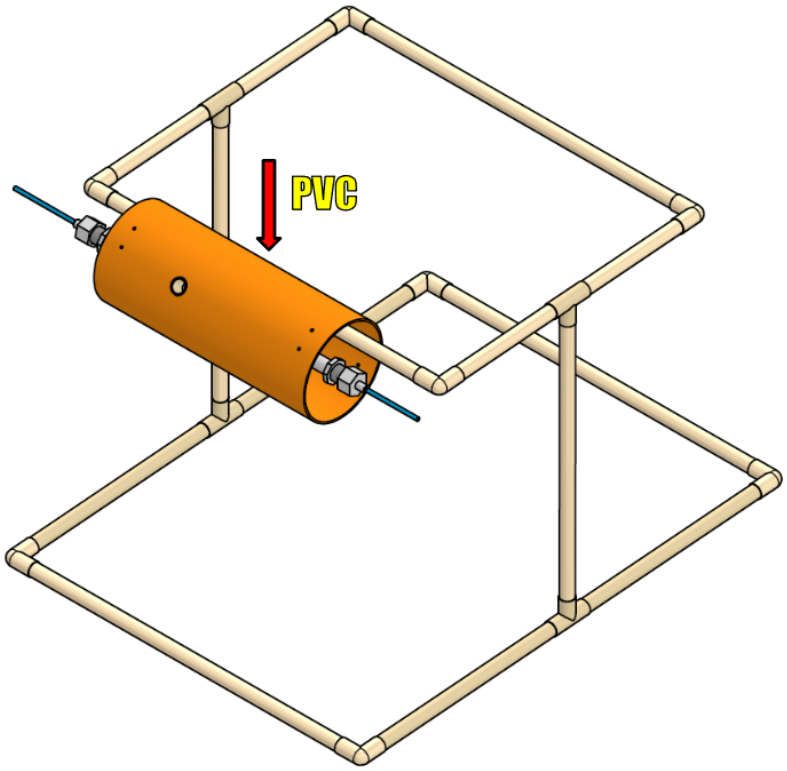


Step 4

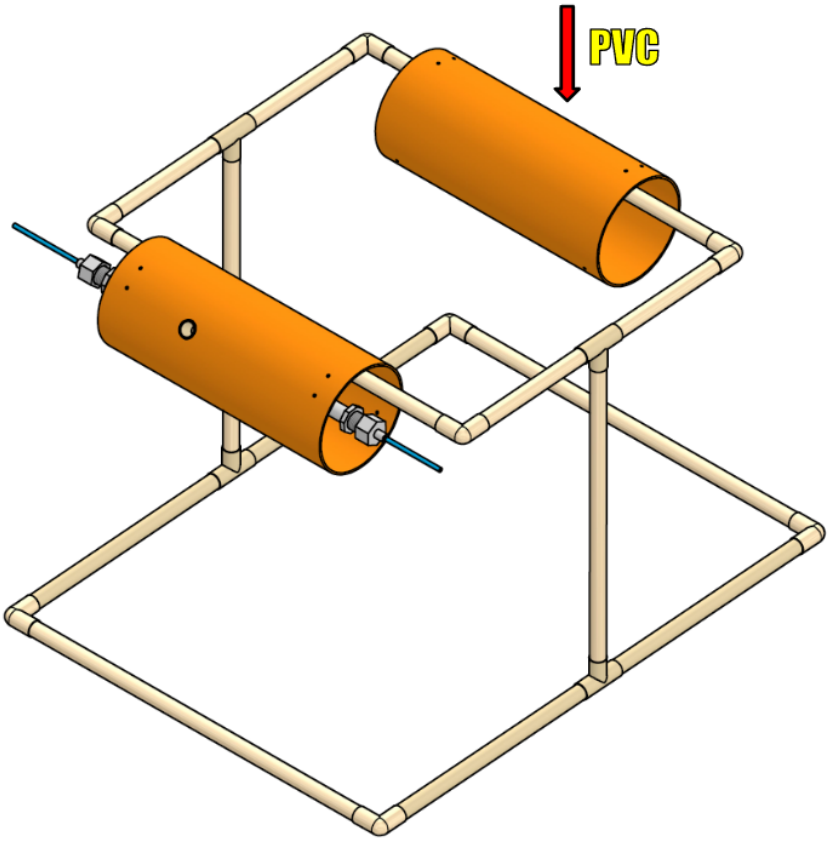




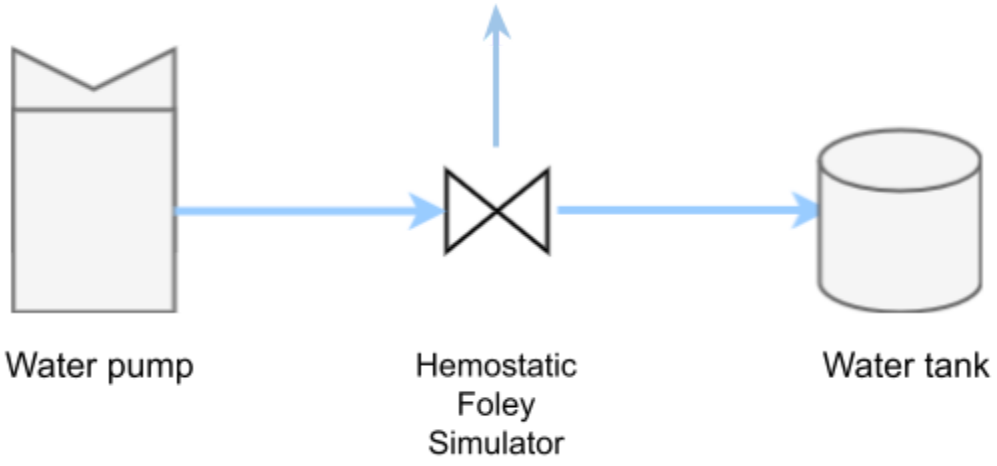
Step 5



Step 6



2.0 - Fluid system



2.1 - Tools and materials

In this section you will find a list and description of all the tools and materials needed to build the fluid system. Note that most of the items listed below can be found at home or in your local store.

2.1.1 - Tools needed

The following list shows the tools that are needed to build the fluid system. We strongly suggest for you to gather all the tools before starting to build, this will optimize time and prevent any delay in the process.

Tools list:

- Scissors
- Teflon tape
- Plastic ties

2.1.2 - Materials needed

The following list shows all the materials that are needed to build the mechanical system. It is essential for you to get everything listed below before you start building the system.

Materials list:

- Latex plastic hose (5mm)
- Water pump (Fumigator)
- Plastic water bottle (> 32oz)

Additional notes:

- For more information on the materials, we recommend checking the shopping list included at the end of this document in section **4.0 Material shopping list.**

Materials

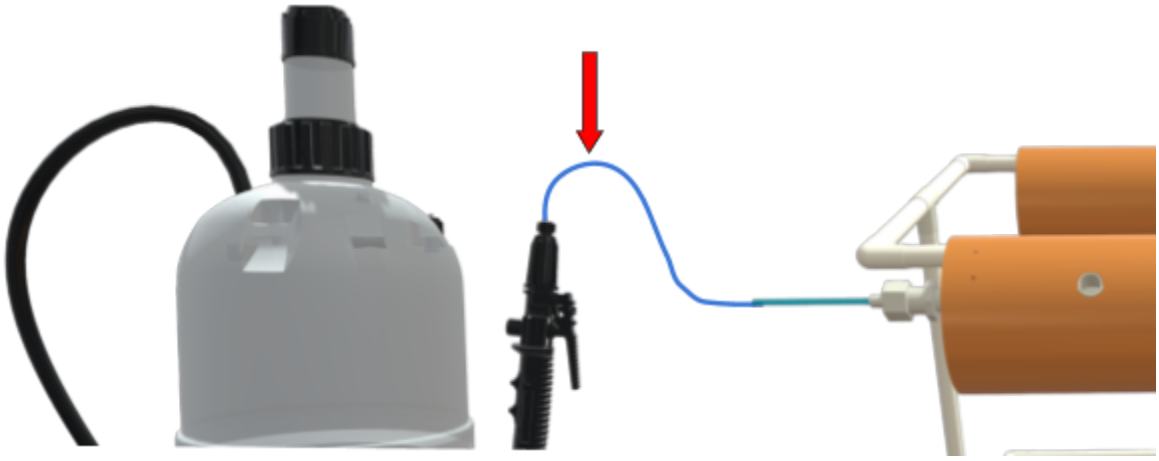
Below you can find a table with a list of the materials and their specifications.

Material	Quantity (units)
Latex plastic hose (Diameter 5.0 mm, Length 1.0 meter)	1
Water pump (Fumigator)	1
Plastic water bottle	1

2.2 - Build the system

Step 1

Insert one tip of the hose in the tip of the fumigator. Use teflon tape to make sure it is tight enough so that it doesn't leak water. *We recommend testing this by pumping water, before continuing with the installation.*



Step 2

After that, put the remaining tip in the water tank (ex. the empty water bottle) as you can see in the Final result page.

Additional notes:

- We recommend the use of teflon tape on the tip of the hose before any connection, this will help to prevent water leaks.

2.0 - Final result