

MAXCLEAN

INSTALLATION MANUAL

PerformMax Industrial Doors
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Manufacturer

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Door Details

Date:
Installing Dealer:
Project:
Door Model:
Serial Number:
Clear Opening Between Guides:
Clear Opening Height:

General

This Installation and Maintenance Manual is to help you install MaxClean Vinyl Door and ensure the door provides reliable and economical operation. DO NOT begin to install a MaxClean Vinyl Door unless you have read all the instructions in this manual. Please contact PerforMax Global Technical Support at +1 (484) 840-8500 at any time during the install.

Symbols Used in this Document



NOTICE

Highlights important information.



CAUTION

Failure to follow instructions or avoid the described situation may result in damage to equipment.



WARNING / DANGER

Failure to follow instructions or avoid the described situation may result in damage to equipment, serious injury and/or death to person(s).

Safety and Power Isolation



An understanding of the system's functions and operation by trained and competent technicians is essential for safe installation, maintenance, troubleshooting and repair.



Incoming energy to the electric motor (door operator) should be isolated using accepted Lock-Out/Tag-Out procedures for electric isolation. Also isolate any equipment near the installation site if the equipment may be inadvertently operated into the door installation area.



Use proper lifting equipment and techniques. Properly secure all loads.

SAFETY INFORMATION

TO PREVENT INJURY TO YOURSELF OR ANYONE AROUND YOU, PLEASE READ SAFETY INFORMATION AND OCCASIONAL REVIEW THEM AS YOU ARE INSTALLING A PERFORMAX GLOBAL HIGH PERFORMANCE DOOR.

- Inspect all components and call PerforMax Global if problems arise.
 - Be sure to anchor guides into secure walls. Only attaching to drywall or sheet rock with result in failure and/or injury.
 - If repairs are required to your high performance overhead door, please call your service provider and/or PerforMax Global.
 - Be sure to ask for assistance if lifting anything heavy.
 - Follow instructions carefully and check out PerforMax Global's YouTube videos for instructional videos.
 - If door is equipped with a torsion tube, use caution when adjusting the tension wheel.
 - Only use hardware that is supplied by PerforMax Global.
-
- Test safety devices before approving proper operation.
 - If grinding or cutting, but sure to wear proper personal safety equipment.
 - Head plates are carrying a lot of weight. Do not attempt to loosen without supporting the curtain first.
 - Be sure safety devices are fully operational before the door goes into operating mode.
 - Do not let children play with the controls.
 - Be sure the guides are adjusted correctly or the door will not operate correctly.
 - Only licensed operators to move heavy machinery.

SAFETY INFORMATION

This manual is aimed exclusively for competent, professional installers and technicians. All operations of mechanical installation, electrical connections and adjustments must be made respecting the good workmanship and applying all the safety rule in force, even if their indications were not explicit in the text of the instructions.

Before starting the installation of the door read the instructions carefully. Incorrect installation can be dangerous. Before beginning the installation check the condition of the product. Before installing the door, Ensure that the floor, the walls or the ex-isting support structure have the necessary strength, capable of supporting the weight of the door, also considering the dynamic forces due to normal operation and the eventual impacts. If necessary make modification to the structures before the door installation. Verify that the structure is suitable to protect or isolate all the areas affected by the danger of crushing, trimming, trapping and general danger. Automation is equipped with the necessary safety devices to ensure compliance with product standards. These devices (photocells, safety edges, emergency stop, etc.) Must be connected according to current regulations and directives in force, good workmanship criteria, the installation environment, the operating logic of the system and forces developed by the door.

Display the signs required by law to identify danger areas. Each installation must clearly show the identification data of the door. Before connecting the power supply, check that the data on the label correspond to the electricity distribution network. A main power switch properly sized must be installed before the control board inlet. Check that the power line is protected by RCD and overcurrent protection. Connect the door to an efficient grounding system. The manufacturer of the door declines all responsibility if components which are incompatible with the safe and correct operation or when changes are made of any kind without the specific permission of the manufacturer. Only original spare parts shall be used for repairs or replacement of components during maintenance or service. The installer must supply all information relating to automation concerning manual and emergency operations and provide the user the Instructions for Use. After installation, packaging materials (plastic, cardboard, etc.) must not be allowed to litter the environment.

This document was issued by the Manufacturer with the utmost care, in any case the Manufacturer does not accept responsibility for any damage caused by errors or omissions in this publication. We reserve the right to change the contents without notice. No rights can be derived from the contents of this document. It is prohibited to copy or otherwise publish by any means without written permission of the manufacturer. This document was issued by the Manufacturer with the utmost care, in any case the Manufacturer does not accept responsibility for any damage caused by errors or omissions in this publication. We reserve the right to change the contents without notice. No rights can be derived from the contents of this document. It is prohibited to copy or otherwise publish by any means without written permission of the manufacturer.

MAINS SUPPLY



DANGER!

GFA TS970 CONTROLLER MUST HAVE A FUSED EXTERNAL DISCONNECT CONNECTED IN BETWEEN MAIN SUPPLY INCOMING TO CONTROLLER. FUSED DISCONNECT MUST BE CORRECT AMPERAGE TO ACCOMMODATE FULL LOAD AMPERAGE DRAW (FLA) OF MOTOR SPECIFIED IN SPEC SHEET. INCOMING POWER AND FUSED DISCONNECT MUST BE WIRED IN ACCORDANCE TO NEC STANDARDS.

1. INTRODUCTION

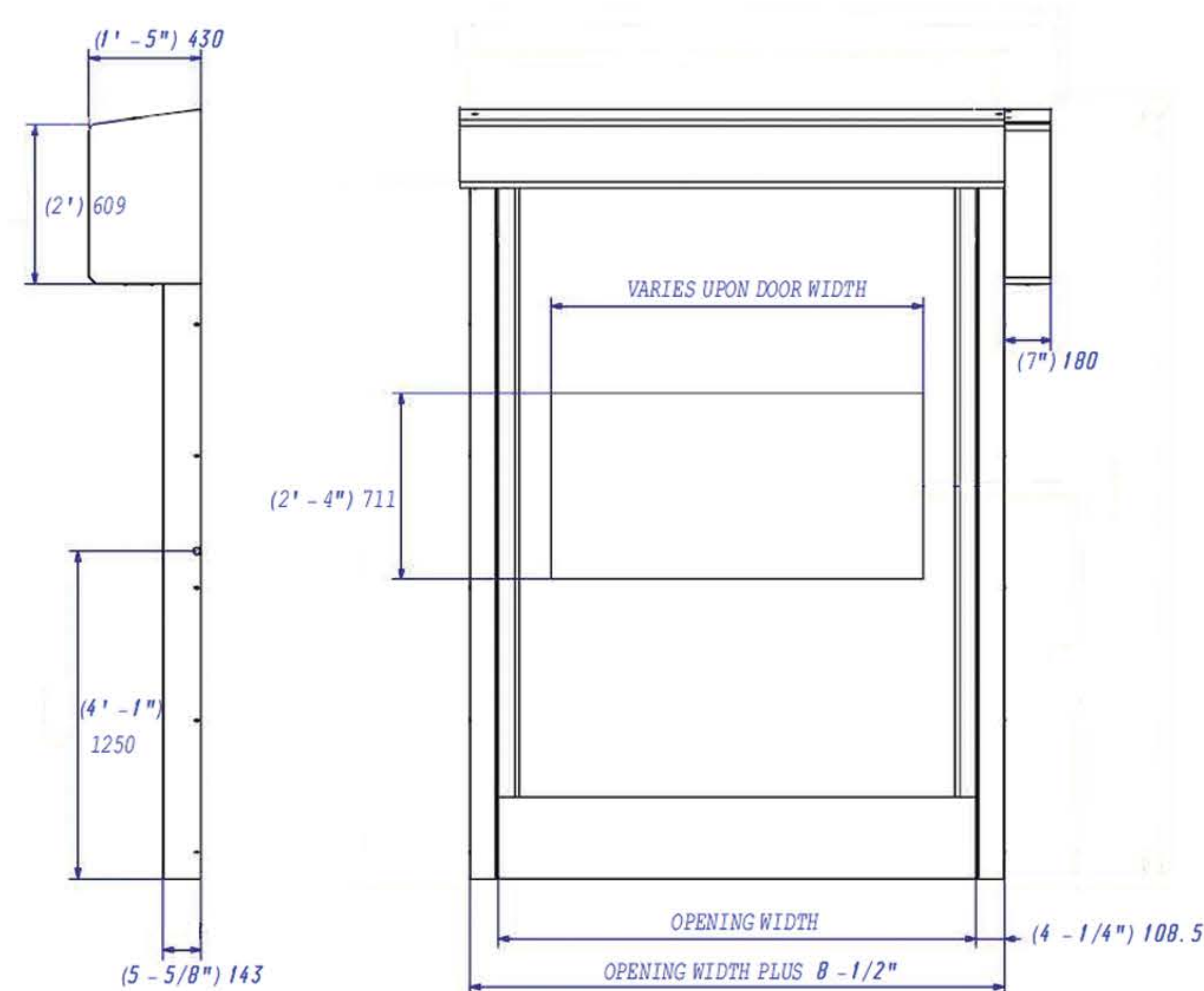
Before starting to use the device, it is necessary to carefully read the contents of this manual. Following the recommendations will ensure proper and failure-free operation of the device. This documentation presents the technical characteristics, describes the rules of use and the maintenance.

2. INTENDED USE

High-speed doors are used both as interior doors to separate one industrial area from another as well as external doors in order to isolate the conditions on the other side. They eliminate heat losses and drafts as well as limit the spreading of smoke, particles, harmful fumes, insects etc., they reduce the noise level. They provide a quick and easy access, which helps optimize the flow of people, forklifts and wares around interiors with a lot of the above moving around. Thanks to the compact build, they can be used in places with limited upper and side areas.

3. TECHNICAL CHARACTERISTICS & DIMENSIONS

- Maximum open / close speed: 60" per second / 32" per second
- Door curtain: made of elastic PVC or polyester 1.2 mm thick
- Available curtain colors: orange (RAL 2009), red (3020), blue (5002)
- Window made of transparent, elastic PVC
- Wind resistance: aluminum bars
- Automatic control with close timer built in
- Integrated Light Curtain and weighted bottom edge
- Direct Drive Operator with electro-mechanical brake -
1x 208V, 3x 208V, 1x230V, 3x230V/460V, 60Hz.
Emergency Hand crank operation standard



Standard System Includes:

1. PVC Window
2. Blue Curtain
3. Direct Drive Motor
4. Automatic Curtain Reinsertion Slot
5. Slanted Hood and Motor Cover

LEGEND:
(FEET/INCHES) MM

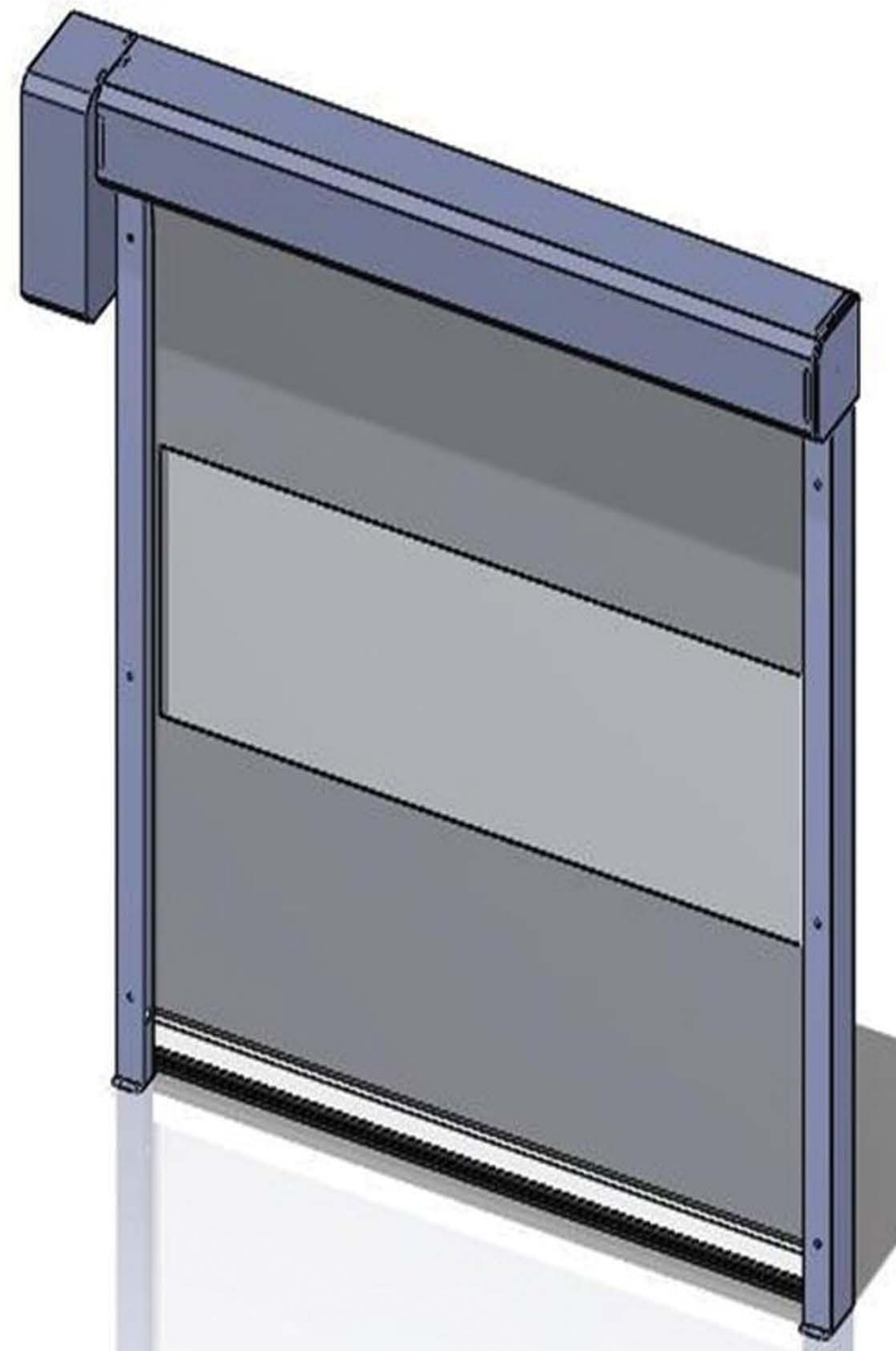
4. INSTALLATION

List of the Door's components:

- Hood Cover
- Motor cover
- Pipe and Shaft
- PVC Curtain
- Bearing assembly
- Head plates
- Curtain Guides
- Gaskets
- Aluminum transverse bars and Soft bottom edge
- Light Curtain
- Electric Operator with Absolute Encoder
- Wires
- Operator/Motor Mount
- Control Panel

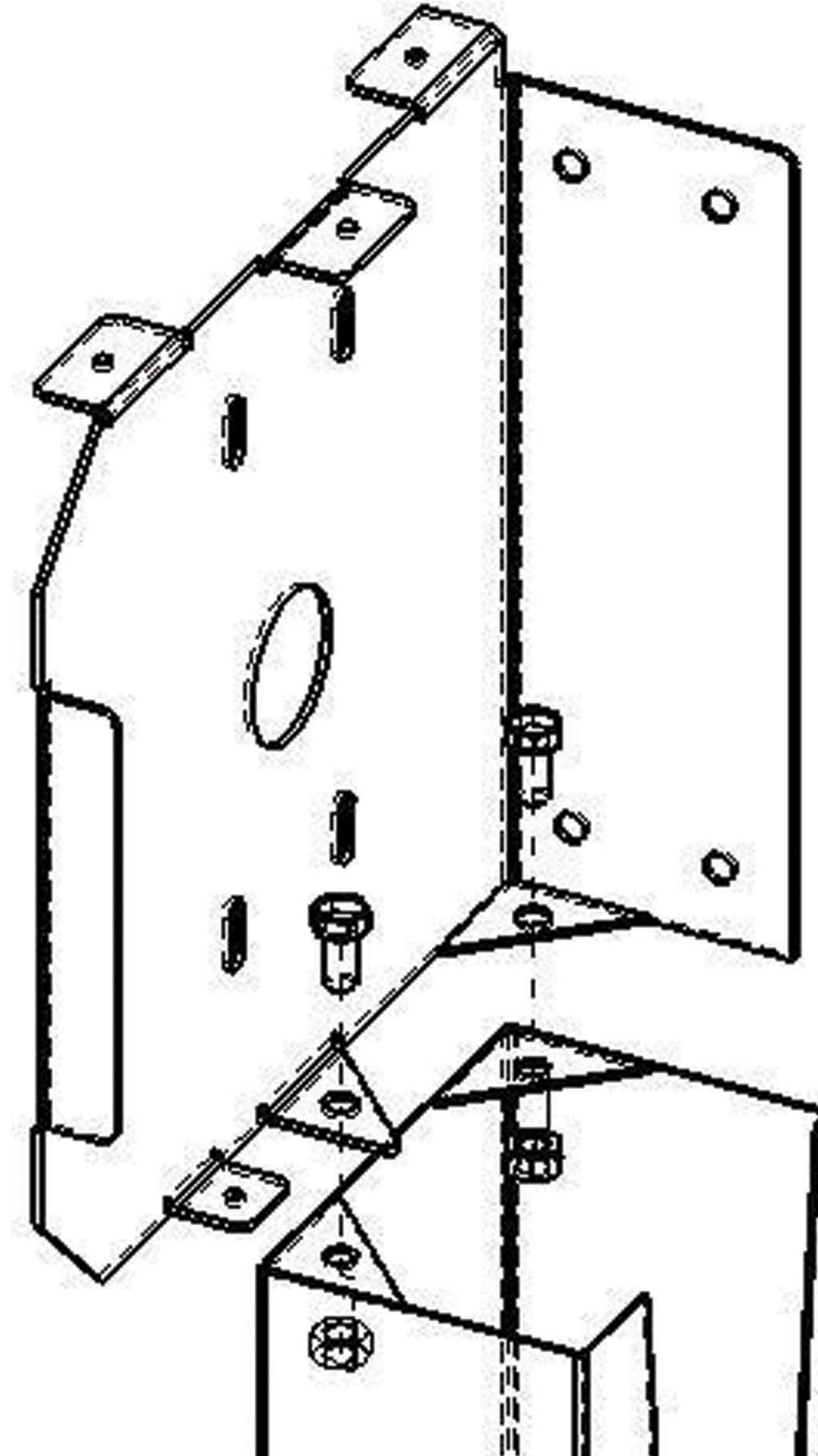
Installation Notes:

- Do not drag the door's Pipe and Shaft on the ground
- Place the shaft on a clean surface
- Do not step on the door's curtain



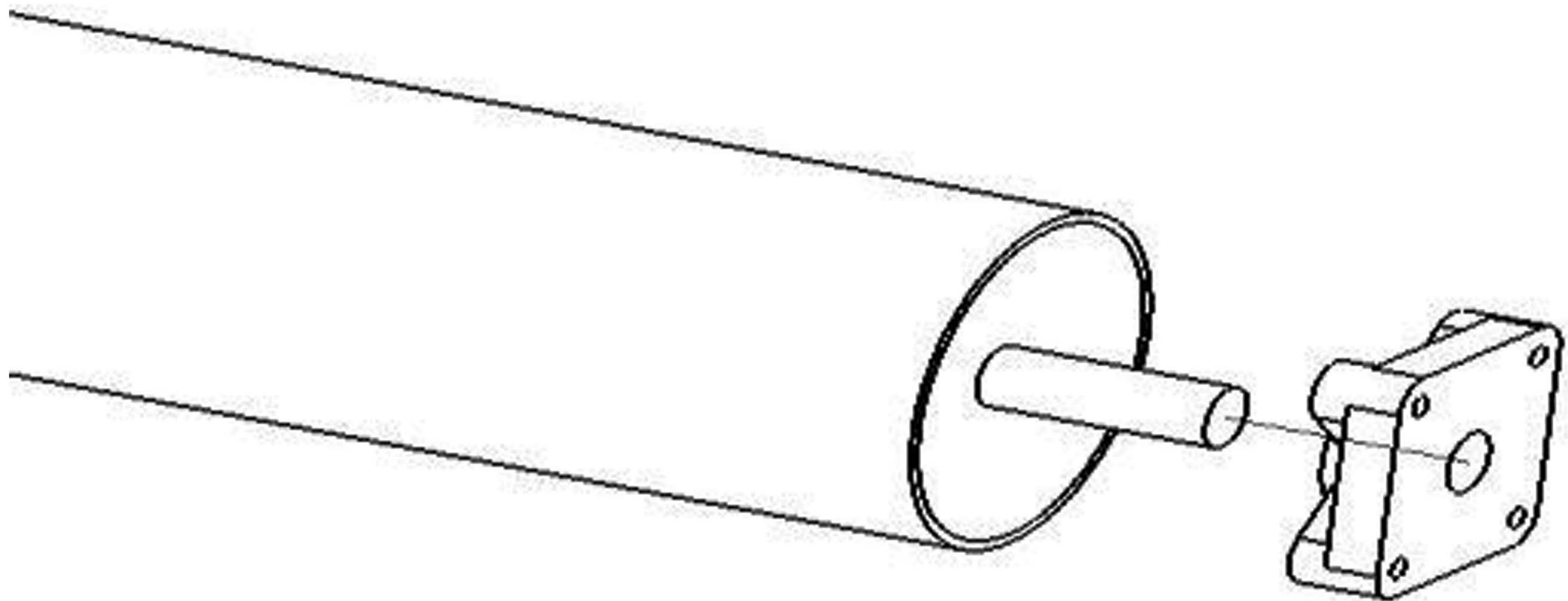
ASSEMBLY (STEP-BY-STEP)

First connect the Curtain Guides with the Head plates using the screws (M10),



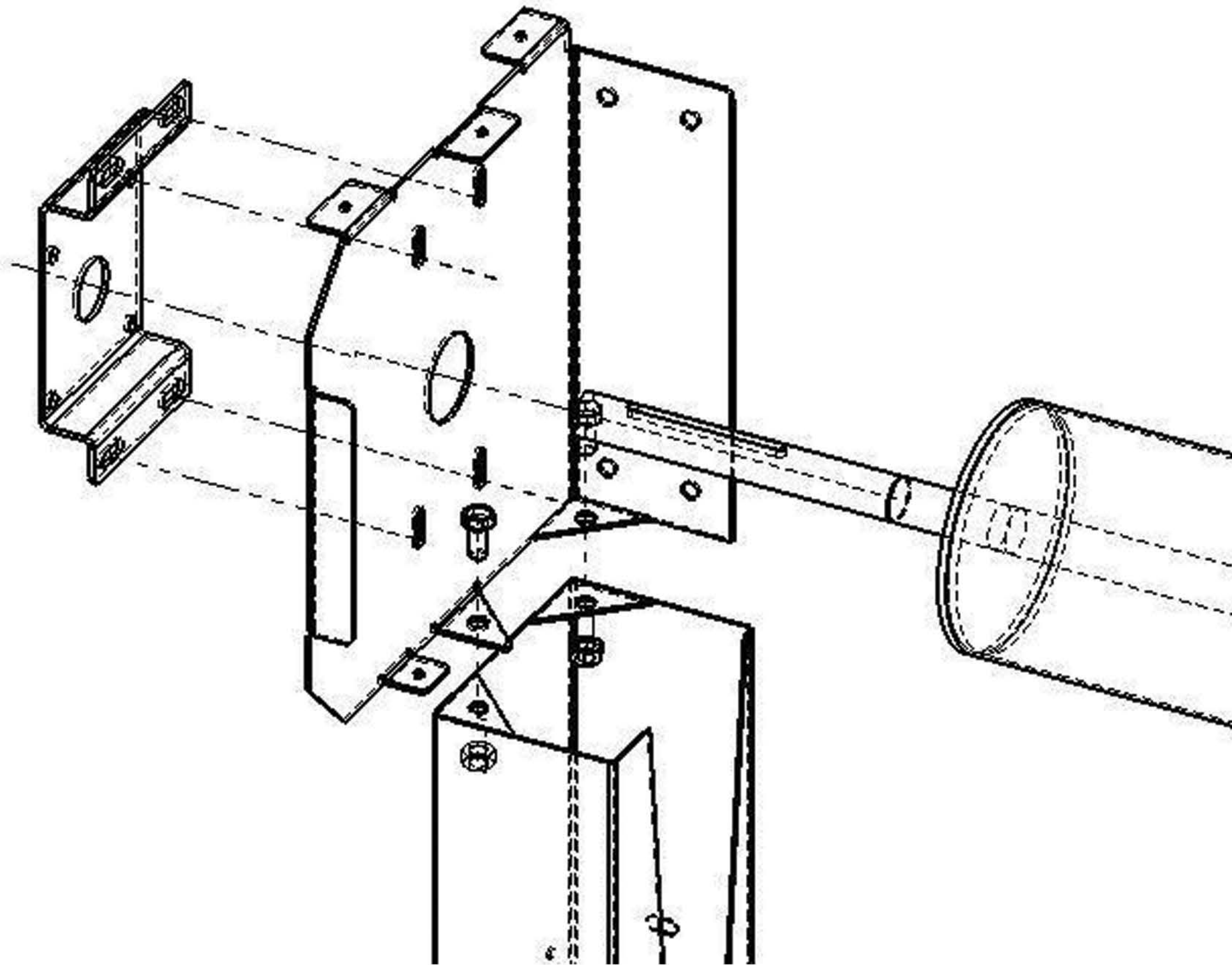
ASSEMBLY (STEP-BY-STEP)

Put the bearing assemblies on the Pipe Shaft



ASSEMBLY (STEP-BY-STEP)

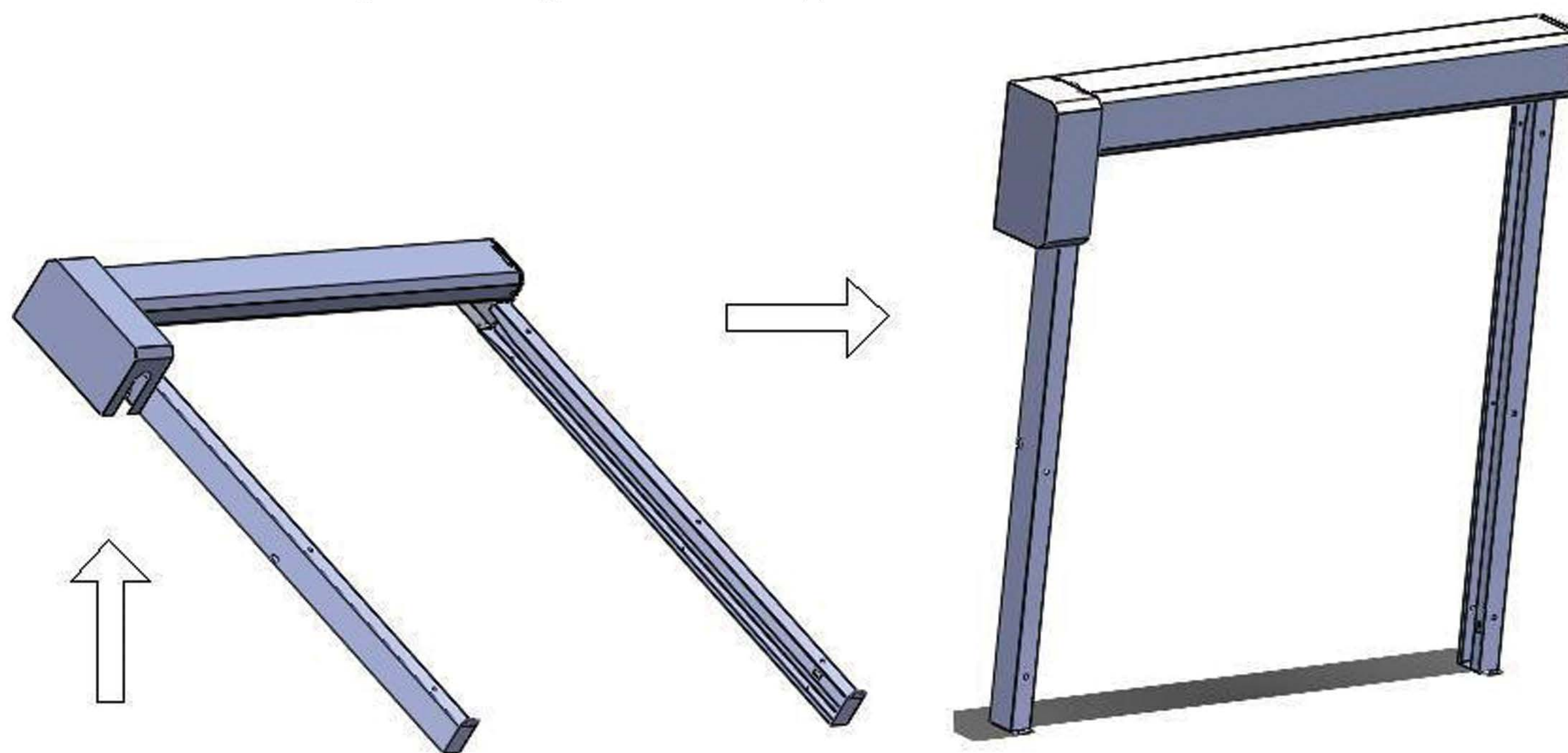
Mount the pipe and shaft between the supports with the curtain rolled up and attach the motor mount to head plate (M10 screws)



After setting the shaft axially and vertically, fix the dowels in bearing rollers,
Mount the motor on the matching spindle using the keyed joint provided and fasten it to the support (M10),
Each screw joint has to be checked and secured using a spring washer,

ASSEMBLY (STEP-BY-STEP)

Raise the assembled door and then anchoring the curtain guides with the supports to the walls and the floor (M10)

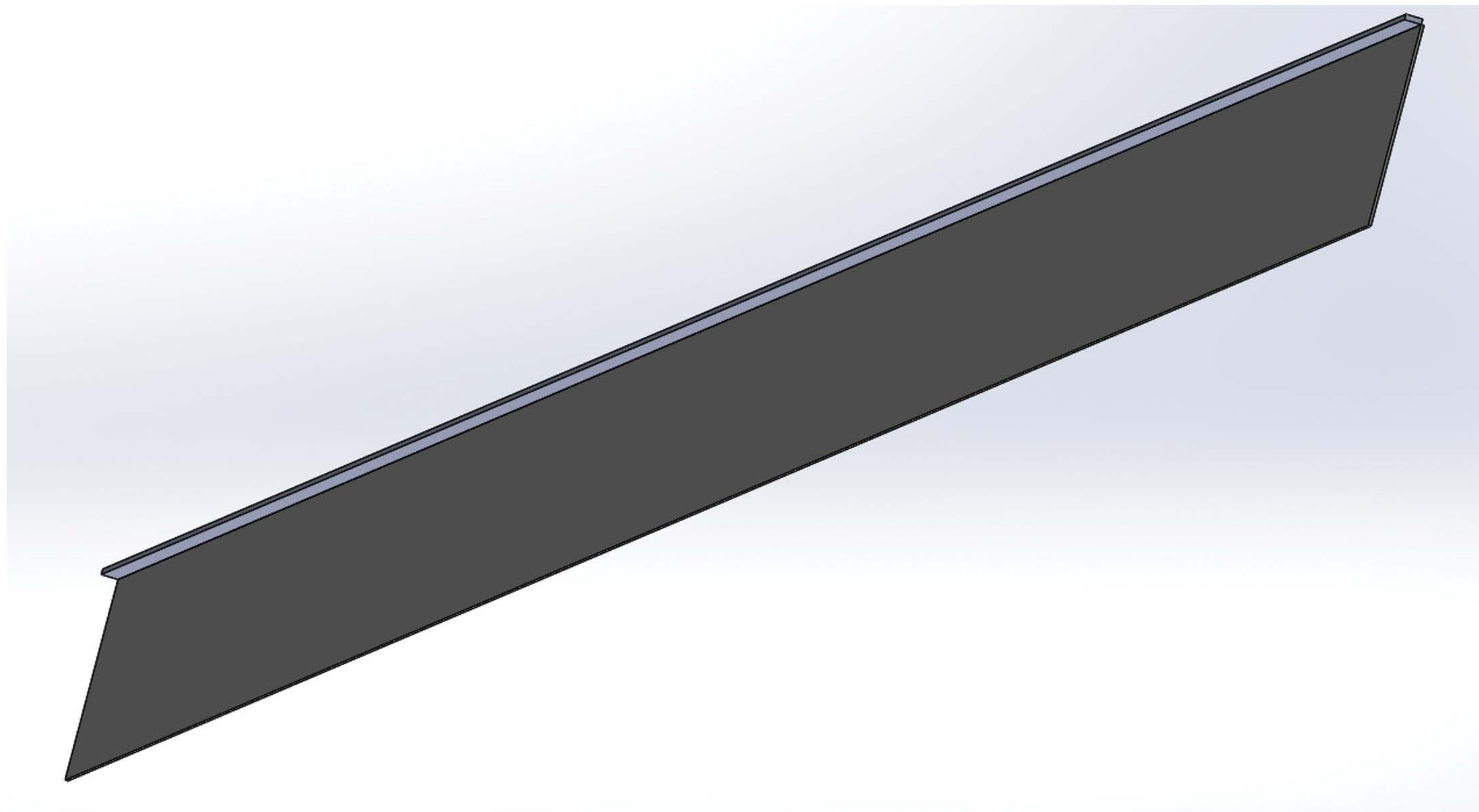


- Make sure that the curtain guides are positioned vertically and on a level ground, apply corrections both vertically and horizontally if they are not,
- Another stage of the assembly is connecting the controller according to the instructions and wiring diagrams provided. The task can only be handled by a qualified electrical professional.
 - See if the curtain rolls up evenly on each end, readjust the curtain tracks or the pipe shaft by loosening set screws on bearings. Once finished, tighten set screws.
 - Finally, install the hood and motor cover.

After the assembly is finished, inspect all the functions and aspects of the door.

ASSEMBLY (STEP-BY-STEP)

Install Light Curtain Wiring Retainer



ASSEMBLY (STEP-BY-STEP)

With the hood off, Place the Wiring Retainer with “C” Channel facing towards the ceiling.

Fix Wiring Retainer 2” from the back edge of the rear guides shown in Figure 1.



Figure 1.

ASSEMBLY (STEP-BY-STEP)

Place Light curtain wire into “C” channel as shown in Figure 2.



Figure 2.

ASSEMBLY (STEP-BY-STEP)

Install Lintel Brush and Retainer

Slide Lintel Brush into Lintel Retainer shown in Figure 3.



Figure 3.

ASSEMBLY (STEP-BY-STEP)

Mount and fix Lintel Brush and Retainer Right below Wiring Retainer as shown in Figure 4.



Figure 4.

ASSEMBLY (STEP-BY-STEP)

Additional Pictures of Lintel Brush attached to Retainer shown below in Figure 5 and 6.



Figure 5.



Figure 6.

5. OPERATION

When operating the door, it is essential to follow the safety regulations and the rules described in this document.

Powering up the door and Preliminary operation

THE CONTROL BOX OPERATION & SAFETY DEVICES

The control box is equipped with the following buttons: up - stop - down



Incoming Power Wiring for 1x 208V, 3x 208V, 1x 230V, 3x230V:

| 3-phase current without neutral conductor | 1-phase symmetrical |
|---|------------------------|
| <p>L1 L2 L3 PE</p> | <p>L N PE</p> |

The up arrow button - pressing it causes the curtain to go up and the door to open,
The down arrow button - pressing it causes the curtain to go down and the door to close,
The stop button - pressing this button causes the door to stop instantly. Resume the operation using the up button.

Safety Devices and Activators

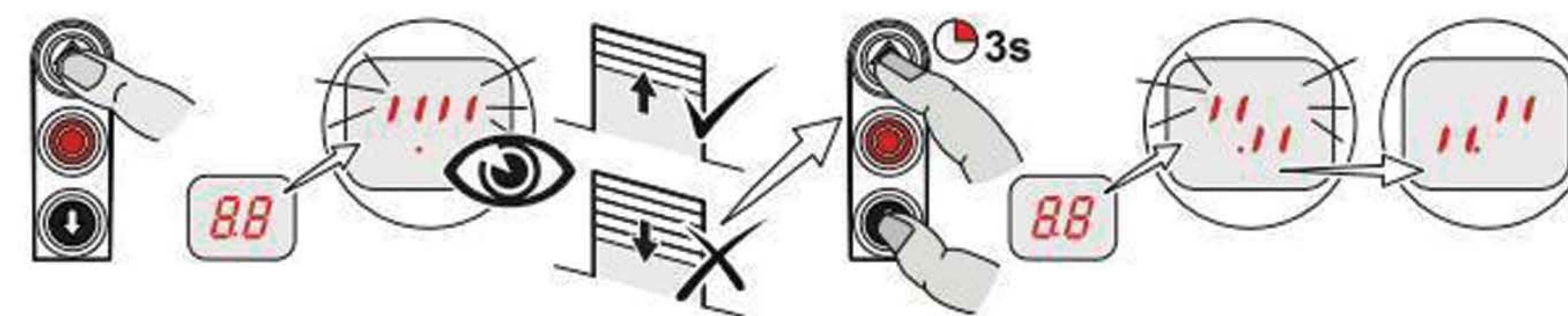
Light Curtain used for protection, if the photocell signal gets blocked, the door won't close. The Light Curtain is installed with a transmitter and receiver.

| | | |
|------------------------------|--------------------|-----------------|
| Light Curtain Wiring: | Transmitter | Receiver |
| | Blue- gnd | Blue-gnd |
| | Brown-24v | Brown-24v |
| | Black- not used | Black-6.2 |
| | | Other Black-6.1 |
| | | White-not used |

(Optional) - A pull switch, a radar/motion sensor, an inductive loop - after a motion being automatically detected by the radar/loop or after pulling the cord, a door-opening impulse is sent to the controller.

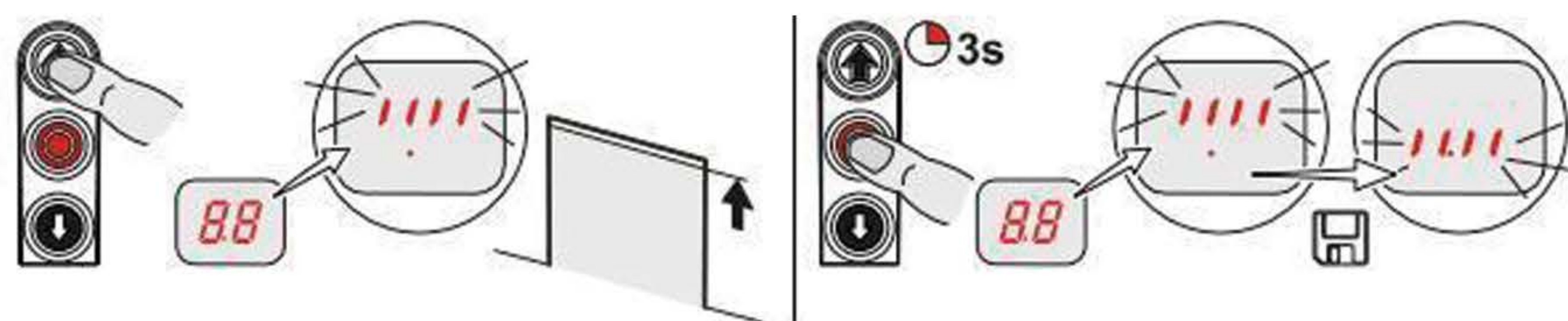
OPERATING THE DOOR

When starting the door for the first time, its extreme positions have to be set and the motor's direction has to be checked. After checking (changing) the direction the shaft rolls in, the upper and lower extreme positions of the door have to be set.



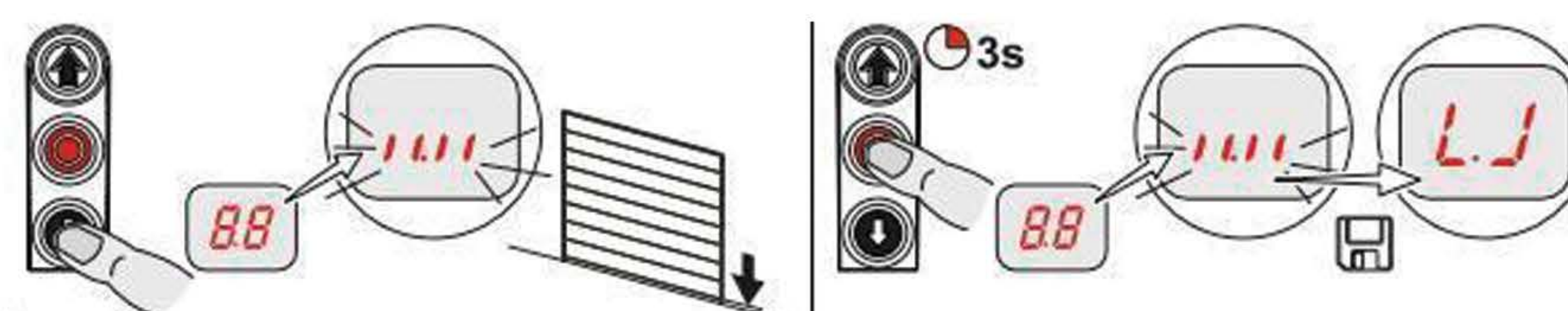
The upper extreme

While holding the UP button down, the passage's height has to be set, once the height has been set, the parameter has to be recorded inside the controller using the STOP button (it has to be held down for 3s).



The lower extreme

While holding the DOWN button down, the door's curtain's closing position has to be set, once the position has been set, the parameter has to be recorded inside the controller using the STOP button (it has to be held down for 3s).



The opening of the door occurs after pressing the UP button. The door-opening impulse can also be triggered by additional devices, like pull switches, radars etc.

- When working in the automatic mode, the door closes on its own after a programmed time counting from the moment of a person or a forklift going through the door (blocking the light curtain signal) or from the opening itself. If the door isn't set to close on its own after a specified time, it has to be closed using the DOWN button.
- The door can be closed at any time by pressing the DOWN button.
- The door can be stopped at any time by pressing the STOP button. The door will be stopped until the operator activates its motion using a button.

Notes:

In the event of a forklift hitting the bottom bar too hard, it might deform and damage it. In the event of the film/tarp wrinkling, the extreme door positions have to be set again.

WARNING!!!

In the event of danger arising or when it is necessary, immediately use THE MAIN POWER SWITCH OR UNPLUG THE CONTROLLER FROM THE SOCKET

6. HIGH-SPEED DOOR INSPECTION AND MAINTENANCE

In order for the door to work properly for a long time, it is necessary to remember the following maintenance procedures:

Safety procedures have to be followed when performing all maintenance work. Before beginning, the control panel power has to be cut off. Maintenance has to be performed regularly at least once a year.

The basic activities covered by the maintenance work:

- checking if the door works properly by performing several operating cycles and checking the protections (the light curtain);
- the photocell has to be cleaned using a soft cloth without any solvent, dust might cause damage to the light curtain;
- removing all the dirt from the door's structure;
- checking the condition and wear of the screen (curtain) and seeing if it isn't torn anywhere;
- the curtain has to be cleaned with a soft cloth, water and soap can be used if necessary, do not clean using solvents of any kind;
- checking all the screws; bolts for tightness
- checking the position of the shaft and if the curtain properly rolls up on the shaft;
- checking the condition of the guides and track
- lubricating the bearing assemblies;
- checking the condition of the gear motor (oil leaks, motor mount, vibrations)
- checking if the buttons and the other activation works properly

7. SAFETY INSTRUCTIONS

THE BASIC TIPS ON SAFETY OF OPERATION

- The general safety procedures have to be followed
- It is forbidden to walk/drive through when the door is in operation.
- It is only allowed to walk/drive through the door when it is fully open.
- It is forbidden to use protections outside of their intended use, i.e. using the photocells or the bottom bar to open a closing door.
- When using the emergency crank for an emergency door opening or closing, it is not allowed to go further than the door's upper or lower position (outside the extremes).
During an emergency opening, the door shouldn't be fully opened, and when switching from emergency to electrical opening, the door has to be lifted about 5cm above the ground using the crank.

REMARKS AND WARNINGS

- for disassembly or repairs of the door, the service should be contacted,
- in order to prevent electrocution or fire, the door should be grounded and the electrical wiring should be protected from water,
- the door should not be installed in places where there's a risk of gas leaks or around flammable materials, as it may lead to a fire or an explosion,
- in order to prevent injuries, the door should be installed with caution, and in the event of detecting a design fault, the installation process should be halted and the service should be notified,
- the door should be turned off and unplugged from the power source in the event of smoke coming out or extensive noise,
- it is forbidden to climb on the door or hang any items on it,
- the door should not be turned off or unplugged when in operation.