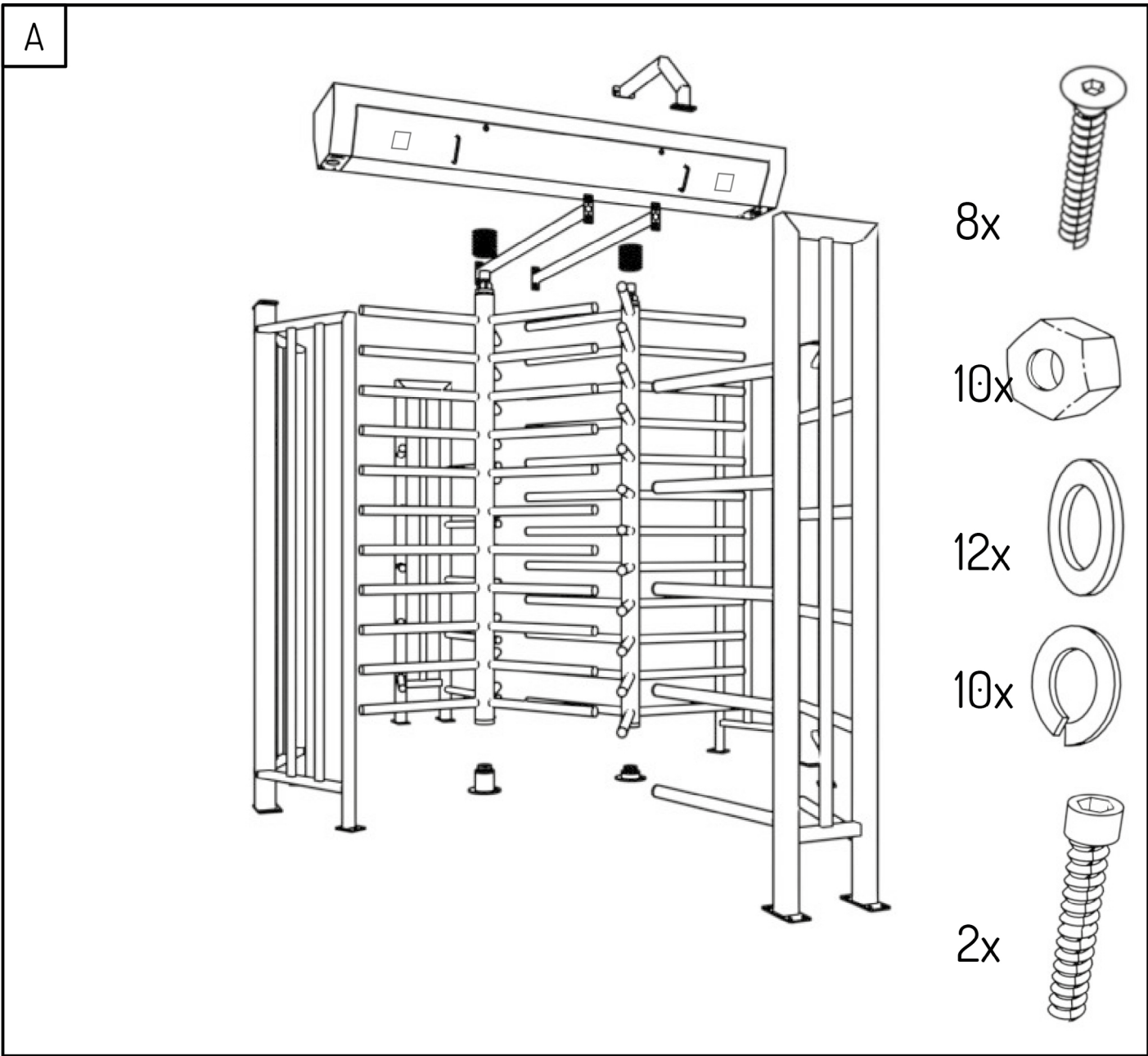
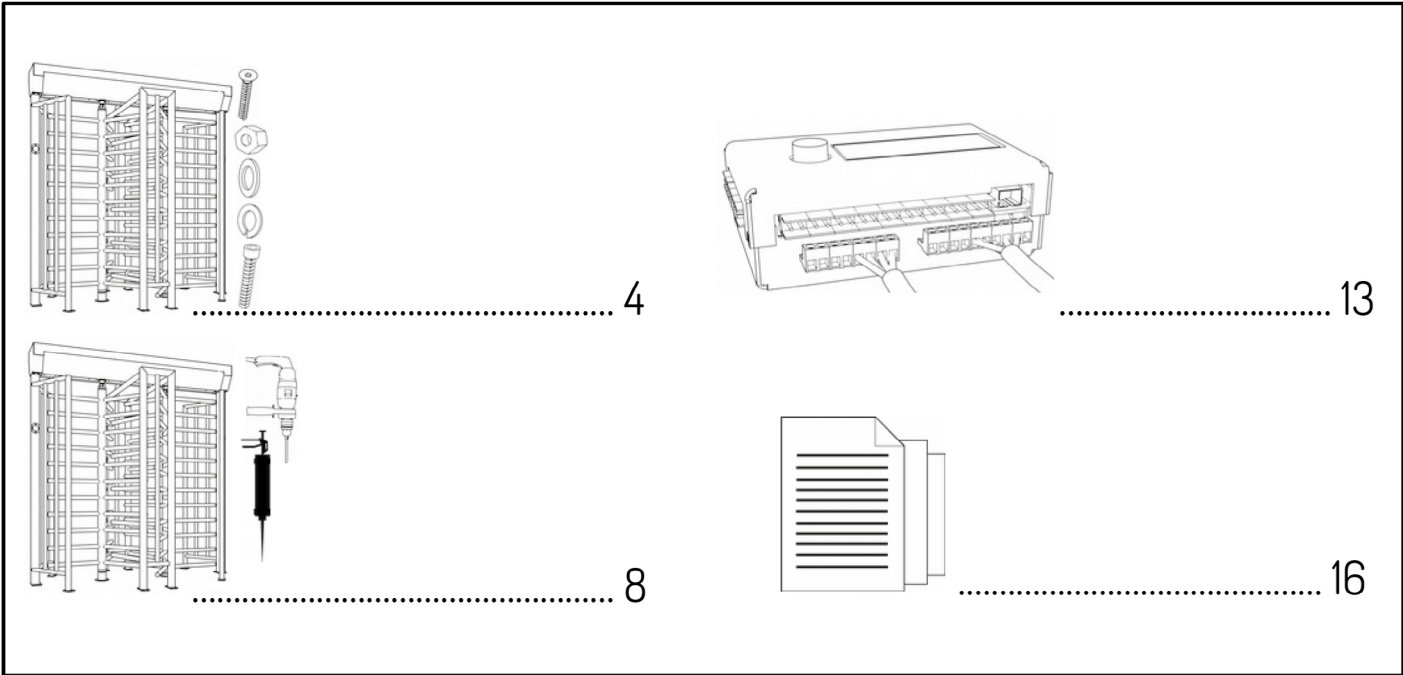
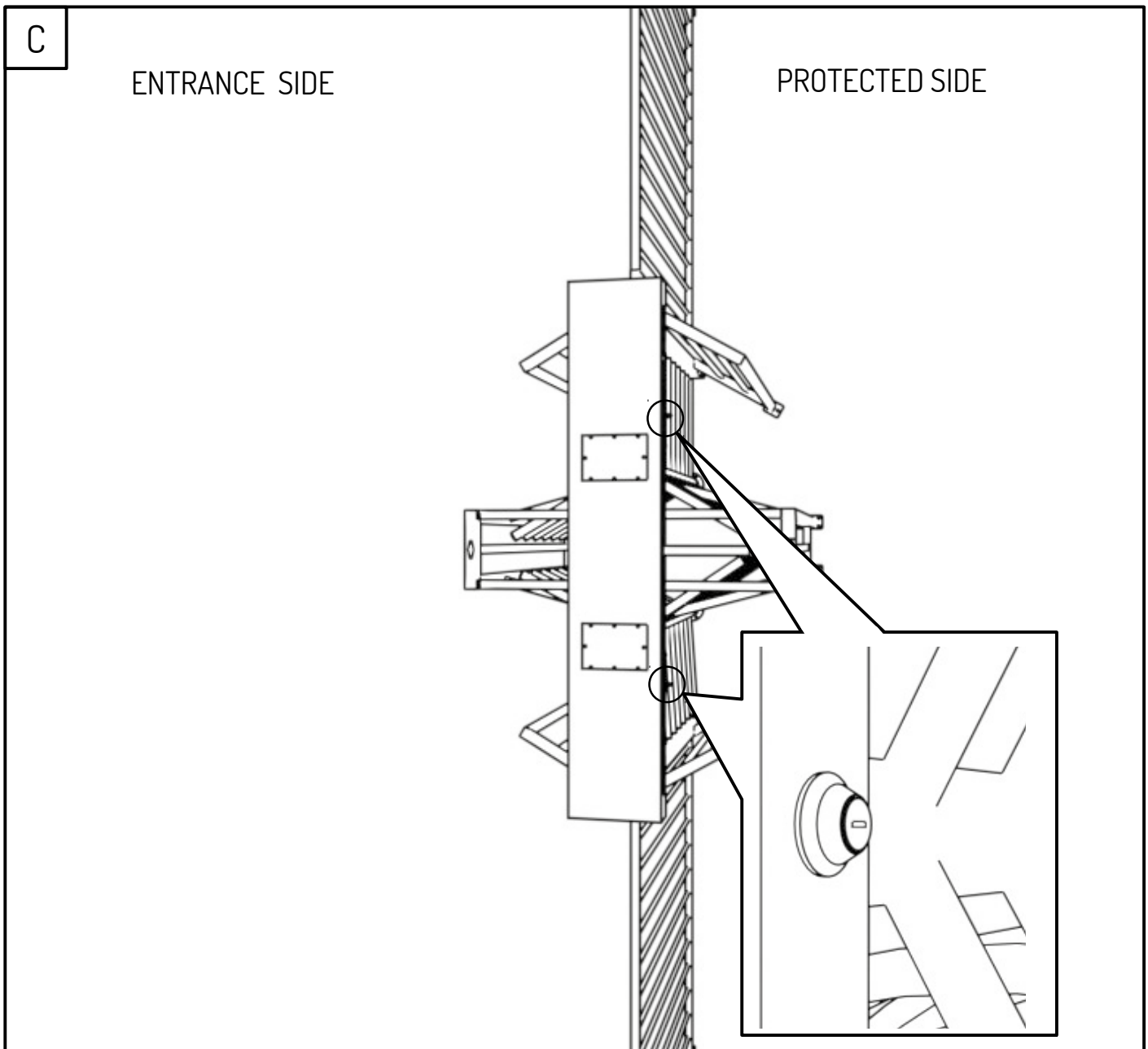
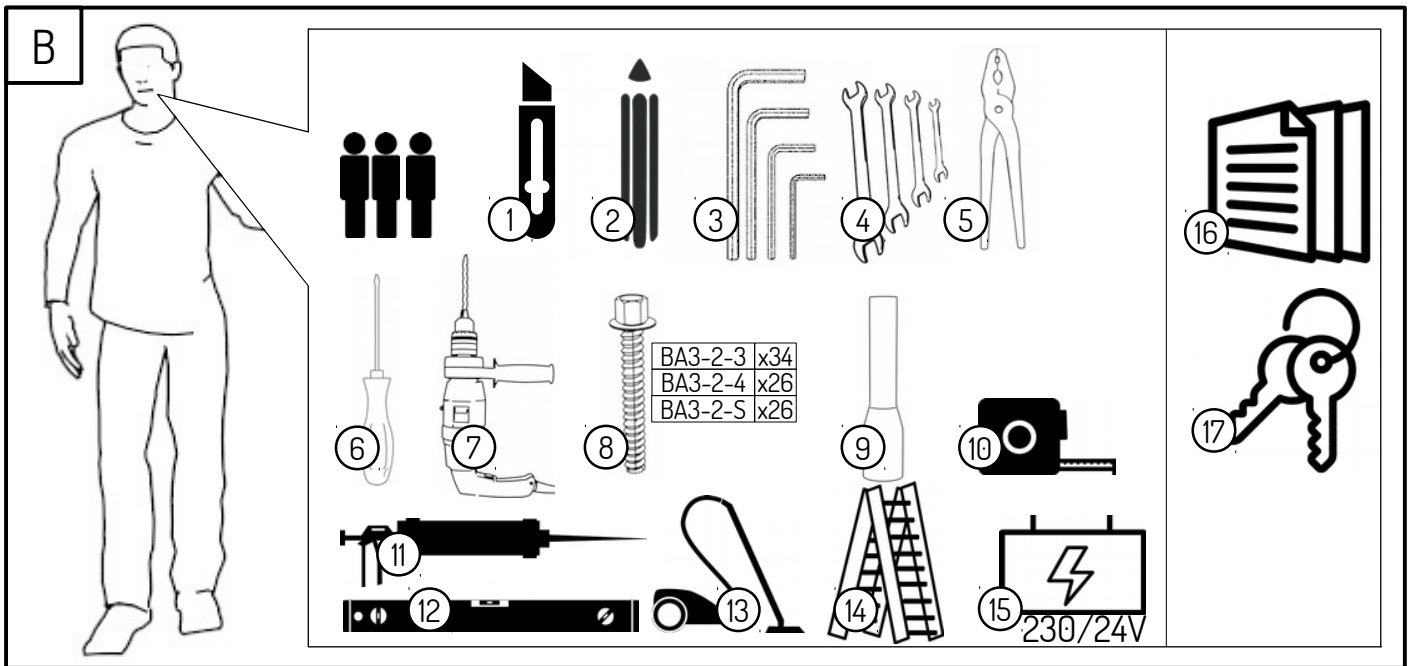


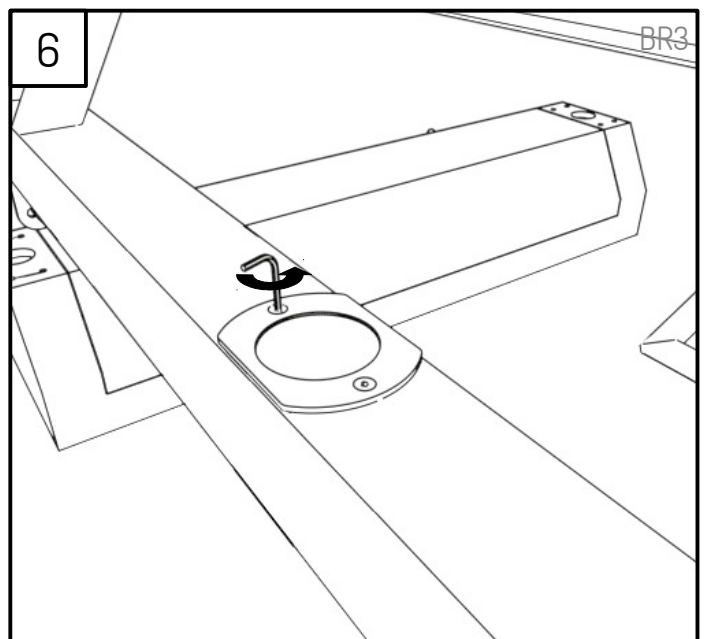
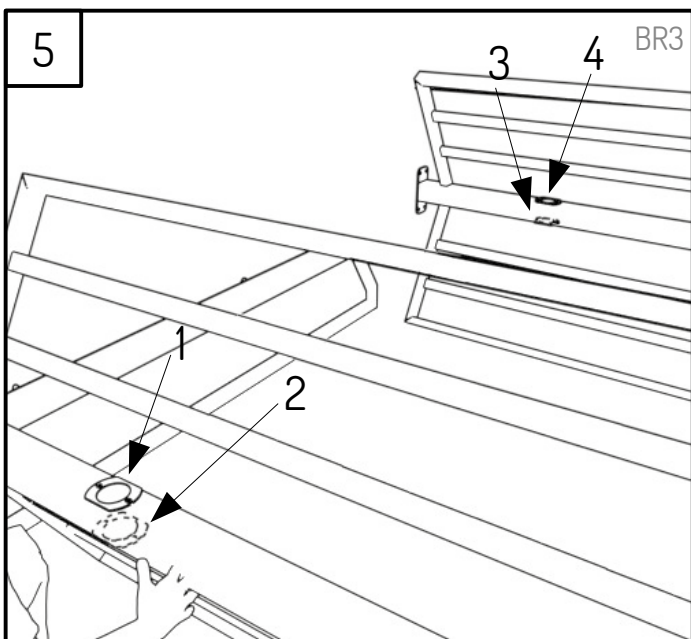
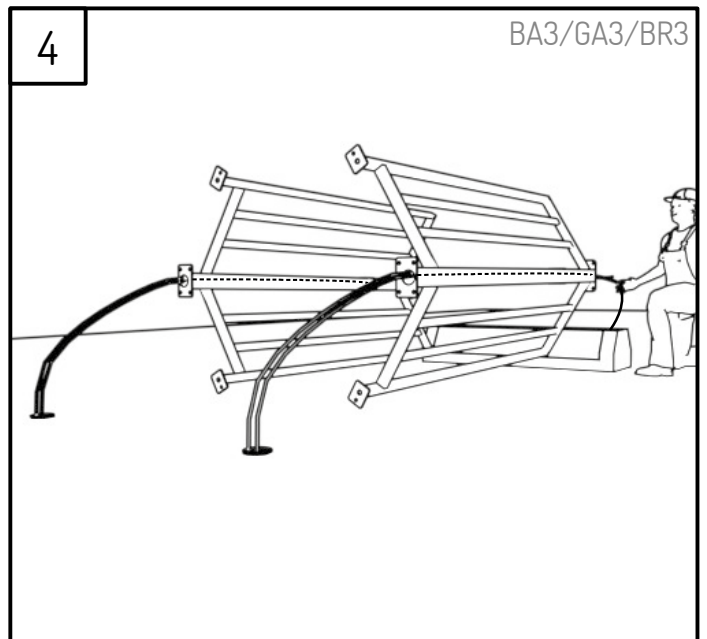
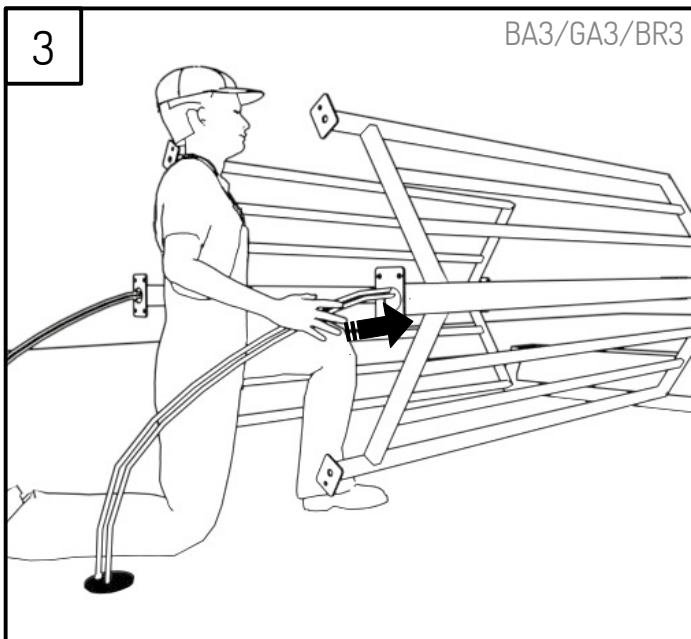
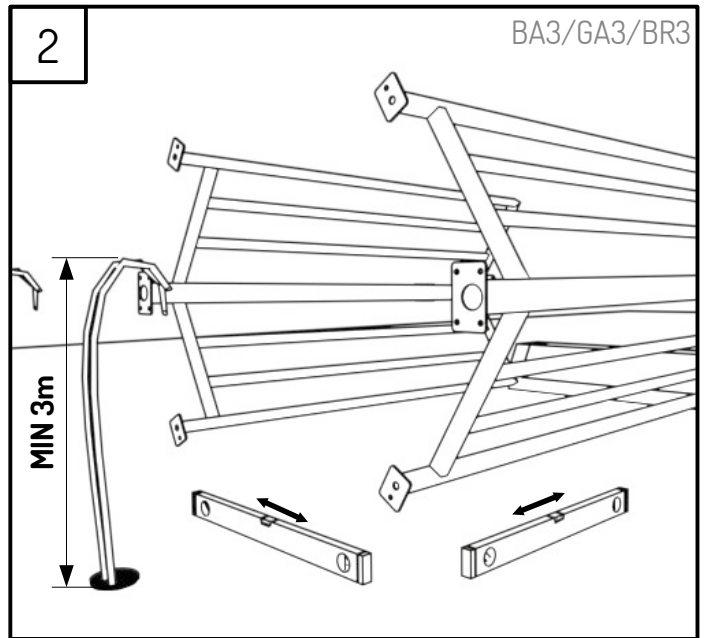
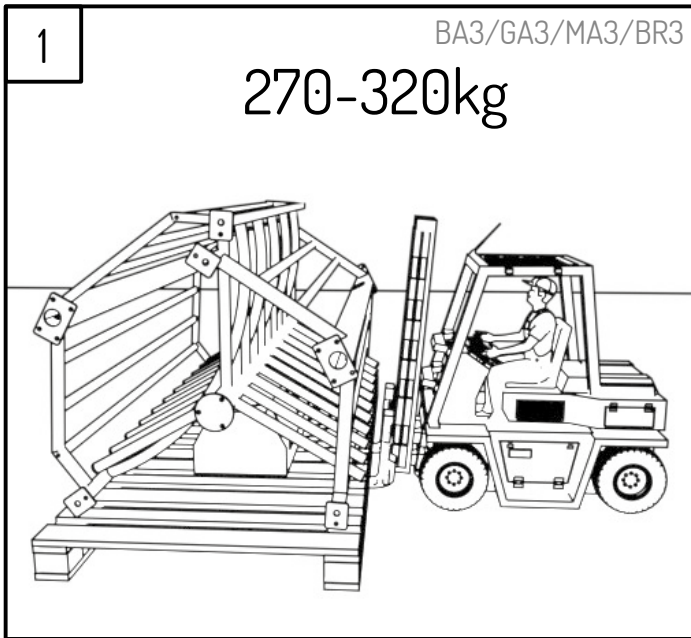


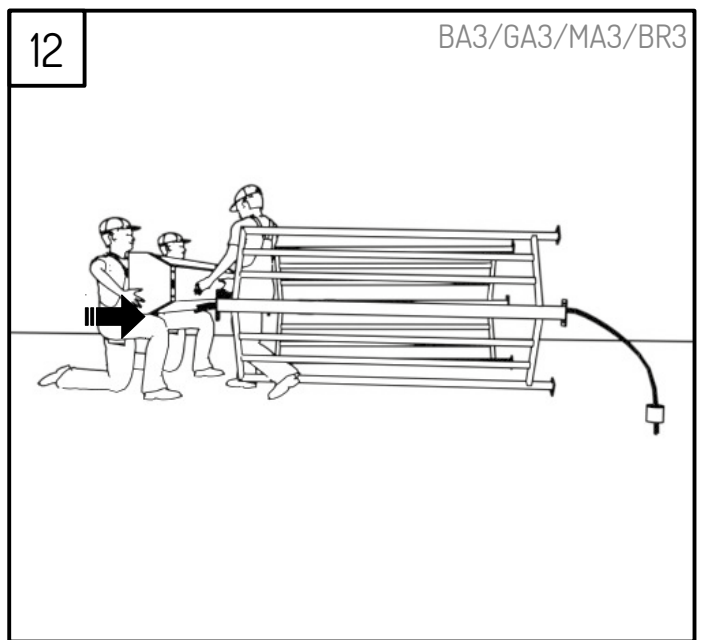
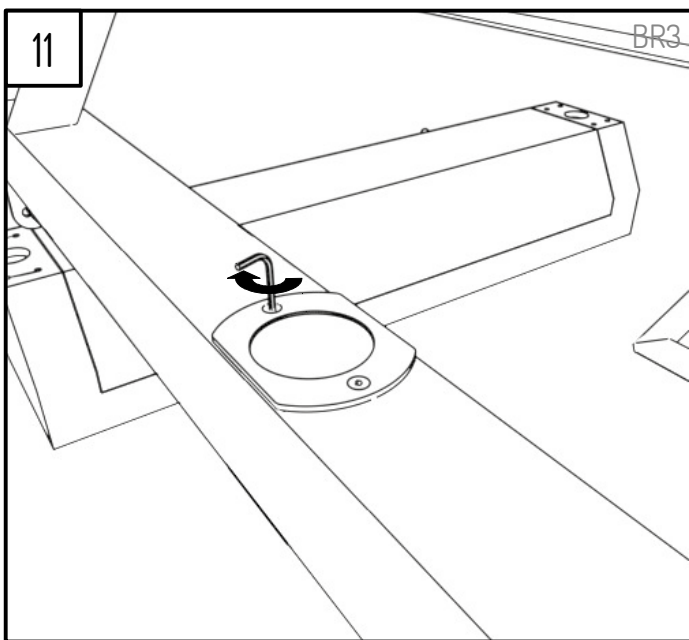
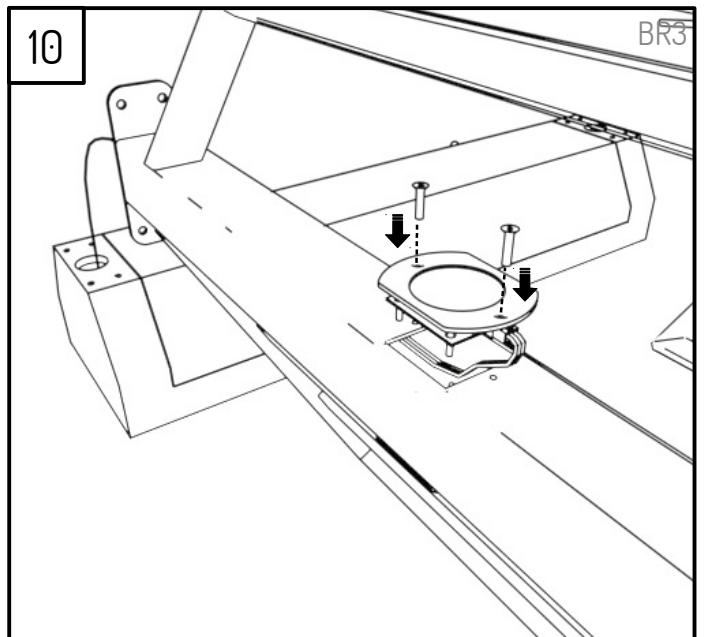
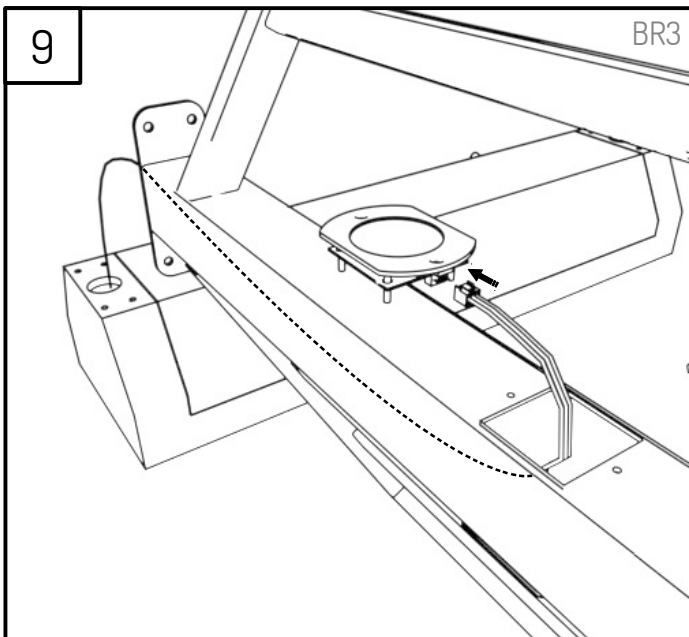
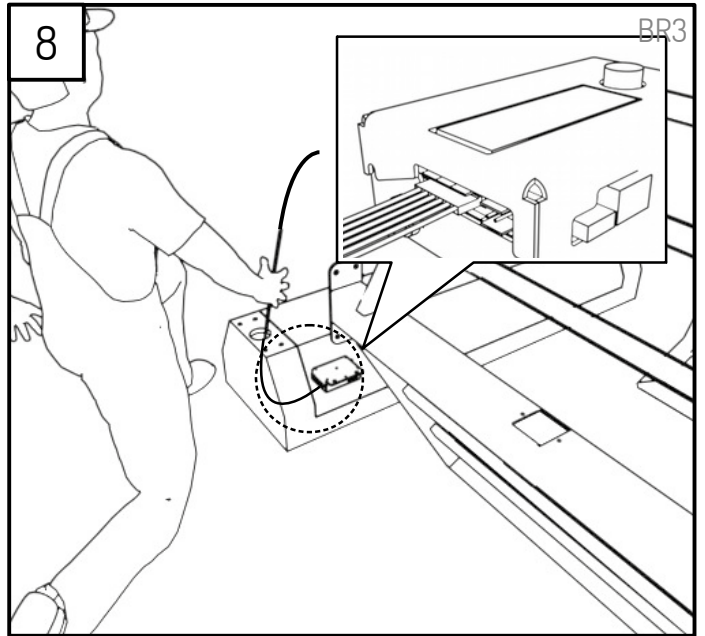
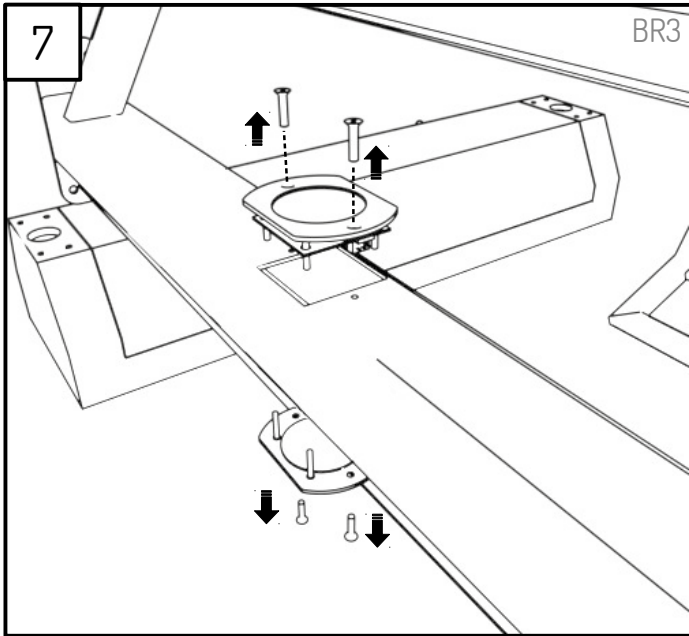
Installation Manual

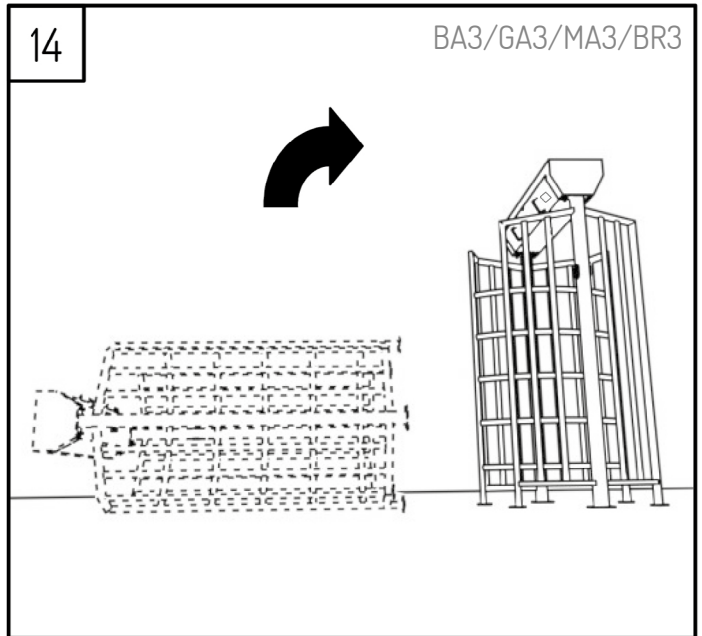
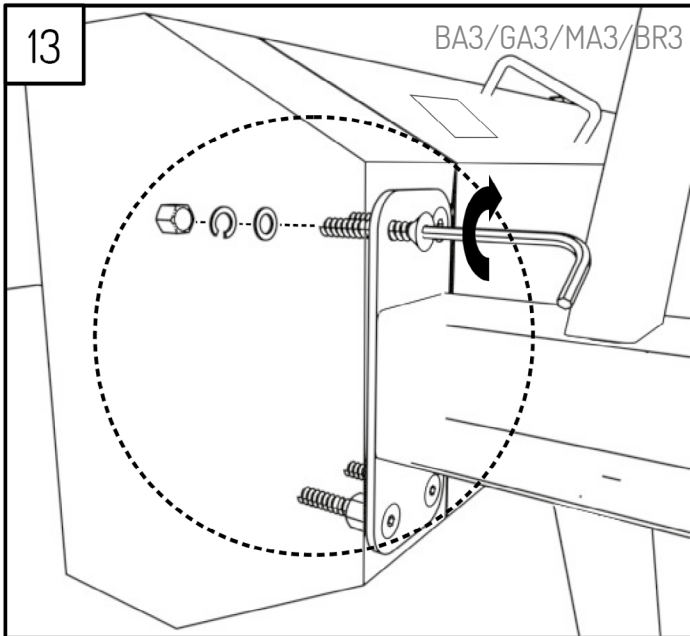
BA3-2, GA3-2, MA3-2











!

Caution: A rotor with eleven arms should be installed on the right side, and a rotor with twelve arms on the left side, when looking at the device from the protected side!

Achtung: Der Elfarm-Rotor soll auf der rechten Seite und der Zwölfarm-Rotor auf der linken Seite, von der geschützte Seite gesehen, montiert werden!

Attention: Vu du côté surveillé, le rotor à onze bras doit être monté sur le côté droit et celui à douze bras sur le côté gauche !

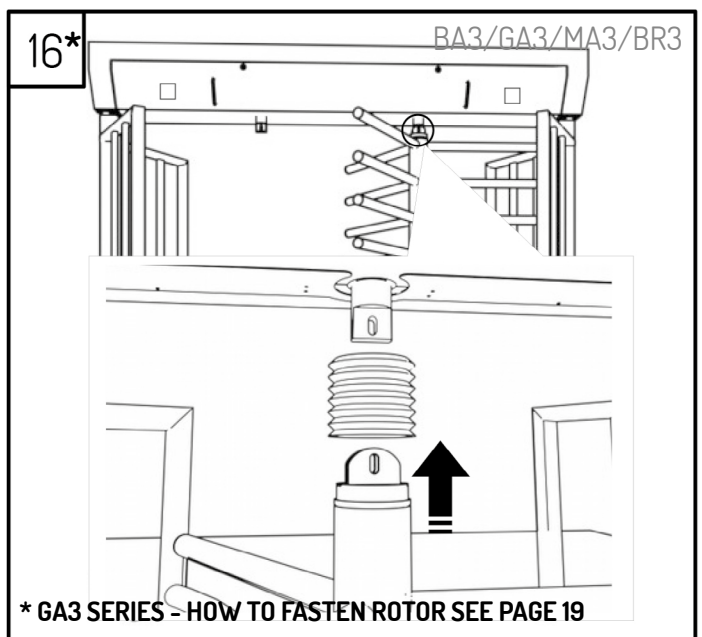
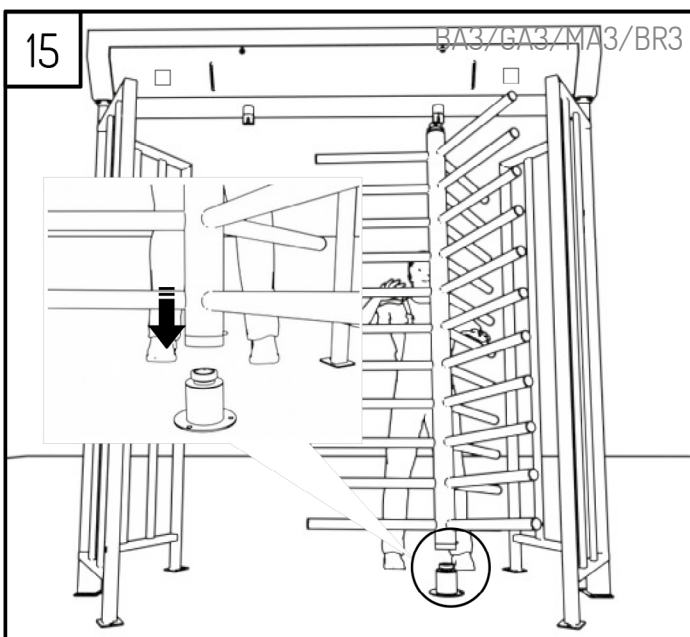
Внимание: Одиннадцатиплопастной ротор должен монтироваться с правой стороны, а двенадцатиплопастной - с левой стороны, если смотреть от защищенной стороны.

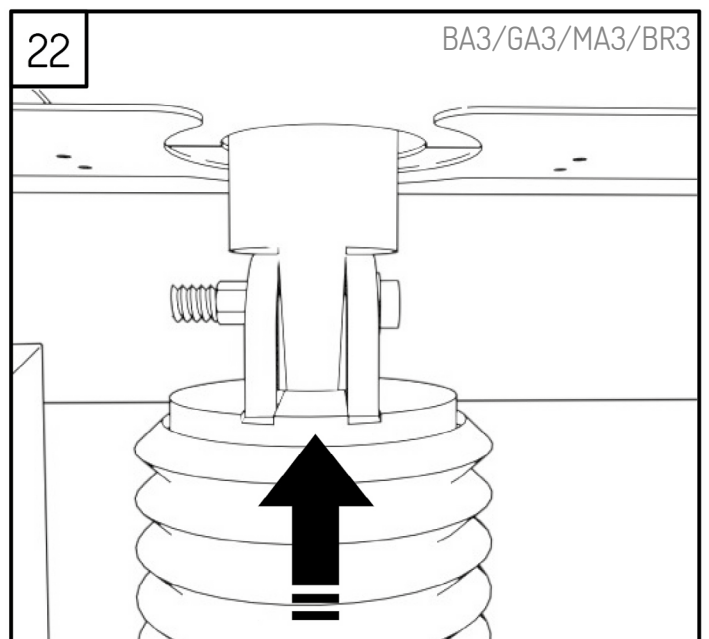
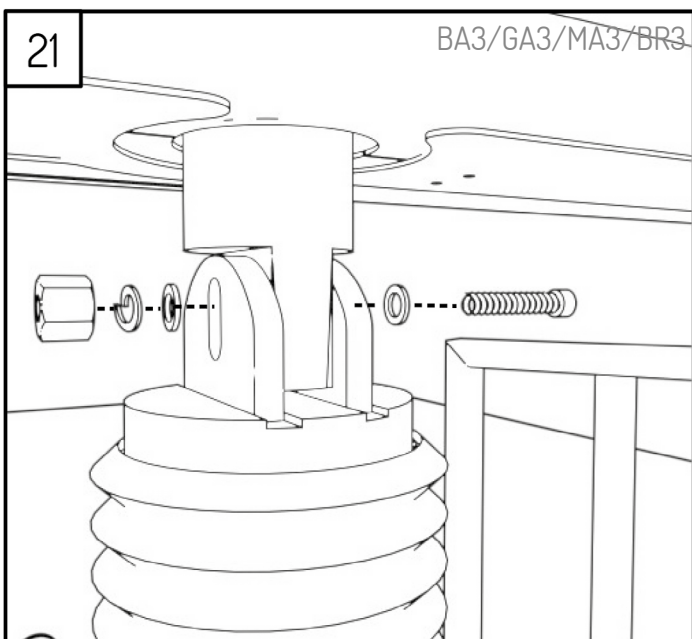
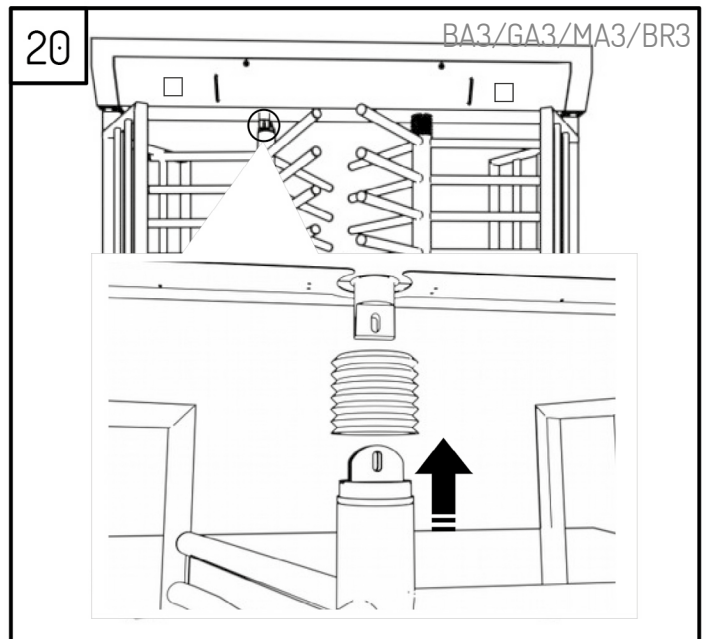
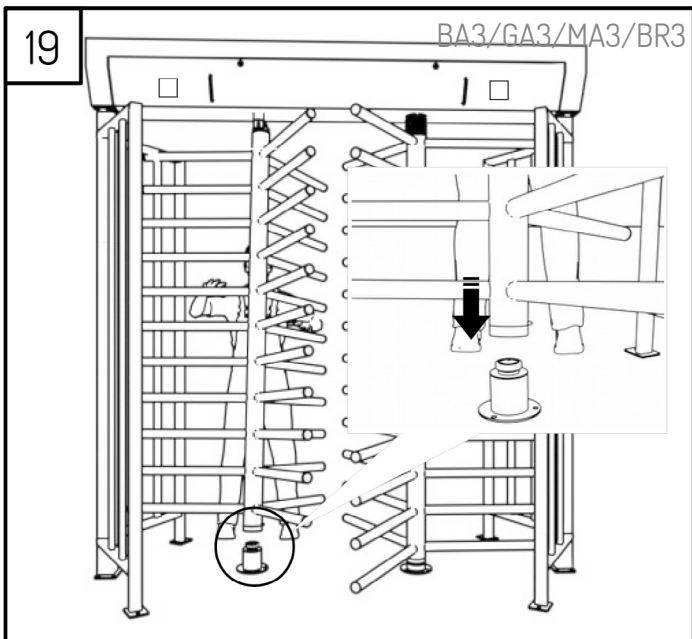
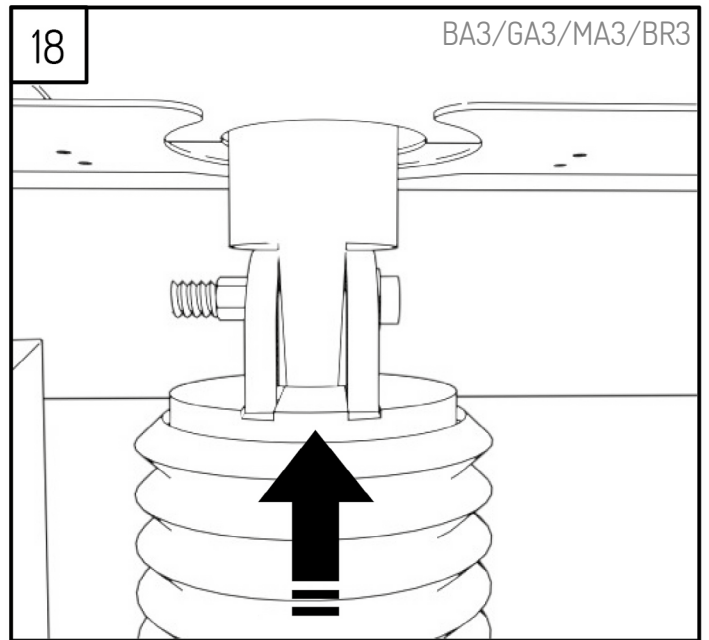
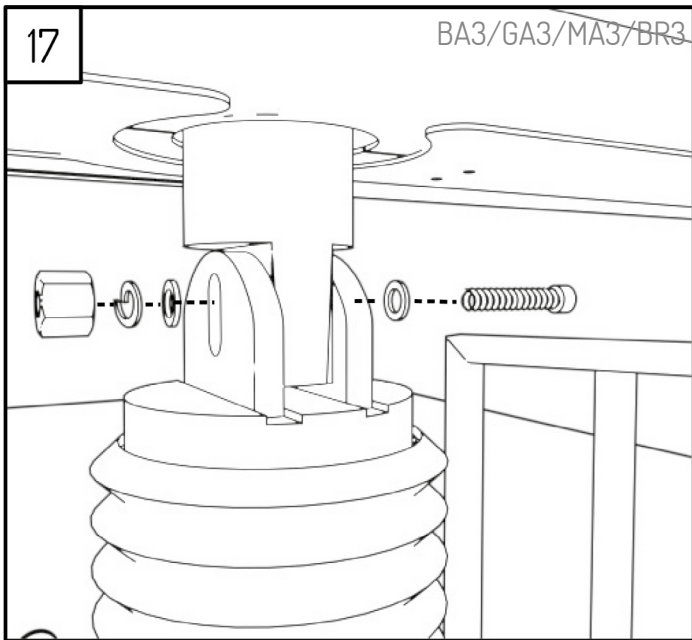
Attenzione: Il rotore ad undici braccia dovrebbe essere montato sulla parte destra, e il rotore a dodici braccia sulla parte sinistra, guardando dalla parte protetta.

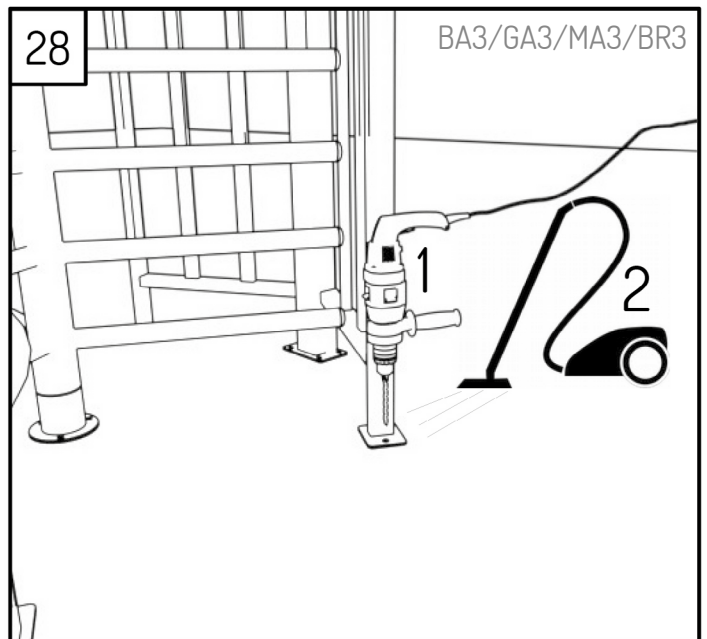
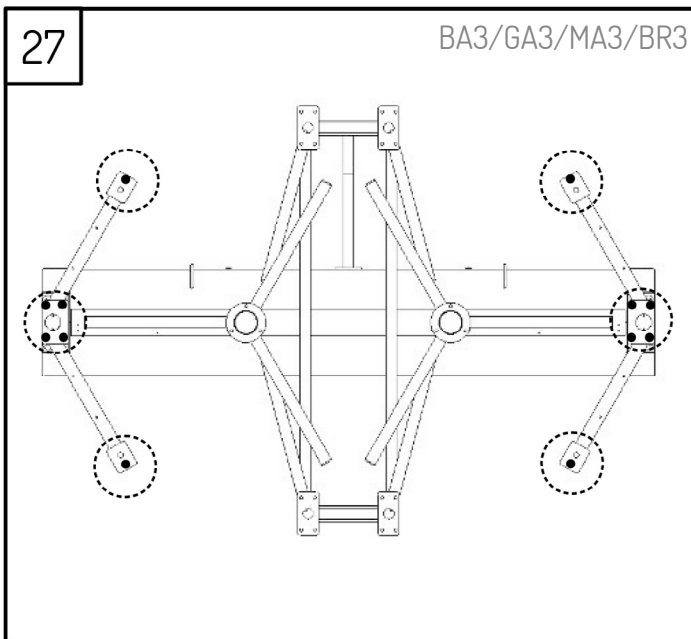
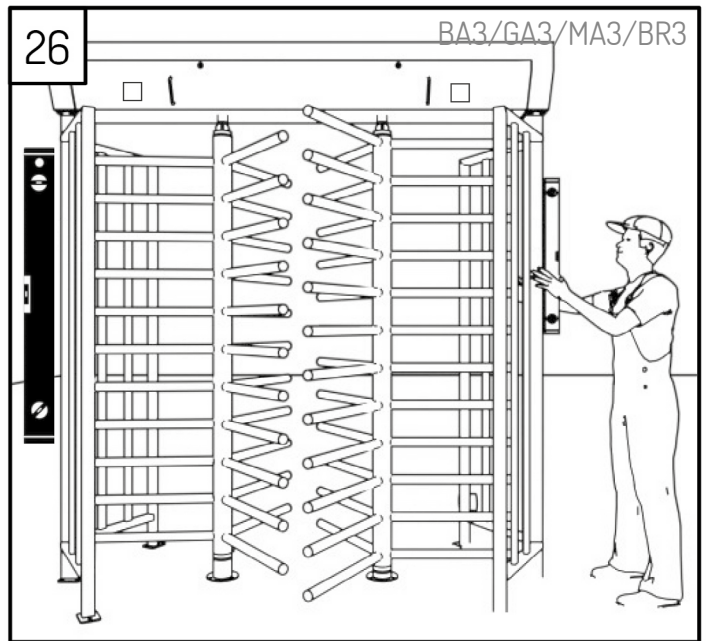
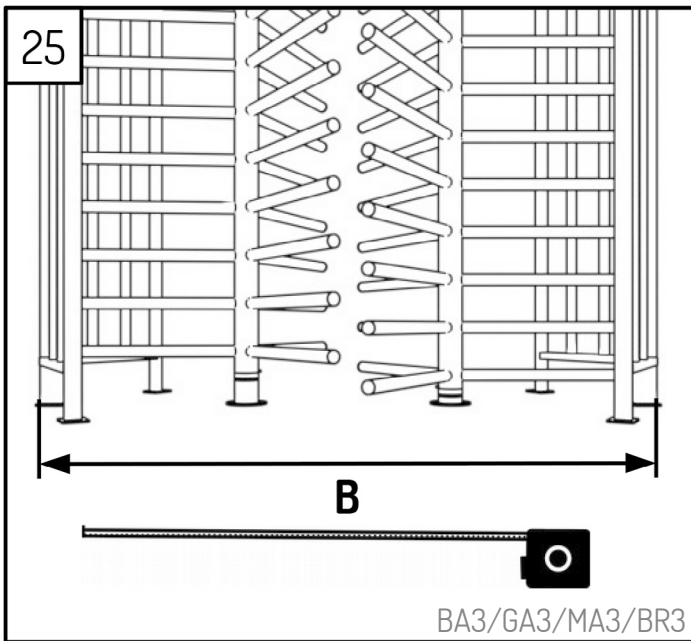
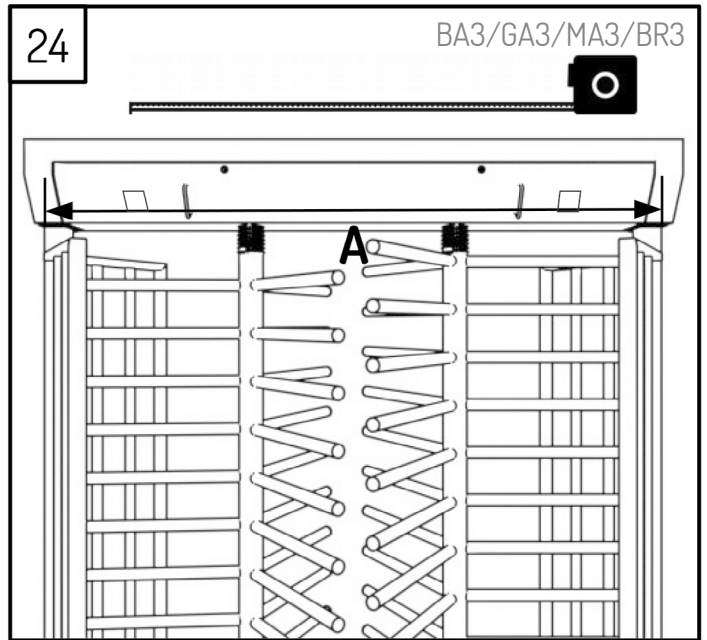
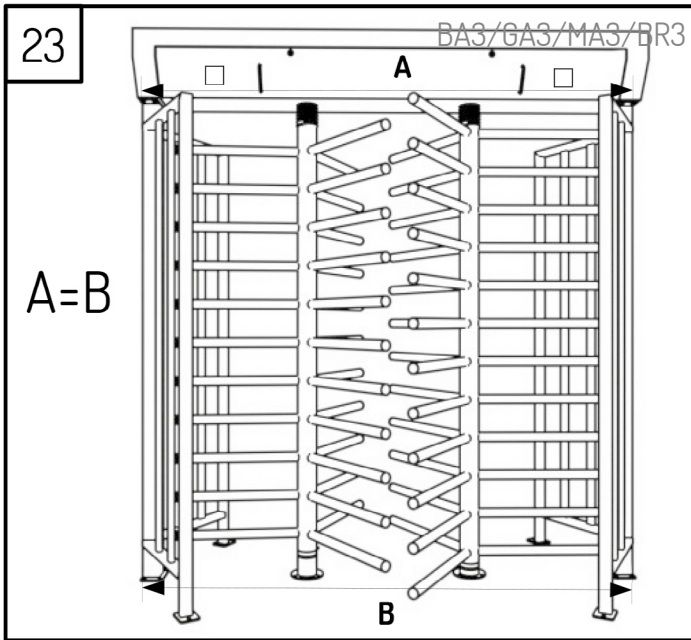
Precaución: El rotor con once brazos debe ser instalado en la parte derecha, y el rotor con doce brazos en la parte izquierda, mirando al dispositivo desde la parte protegida

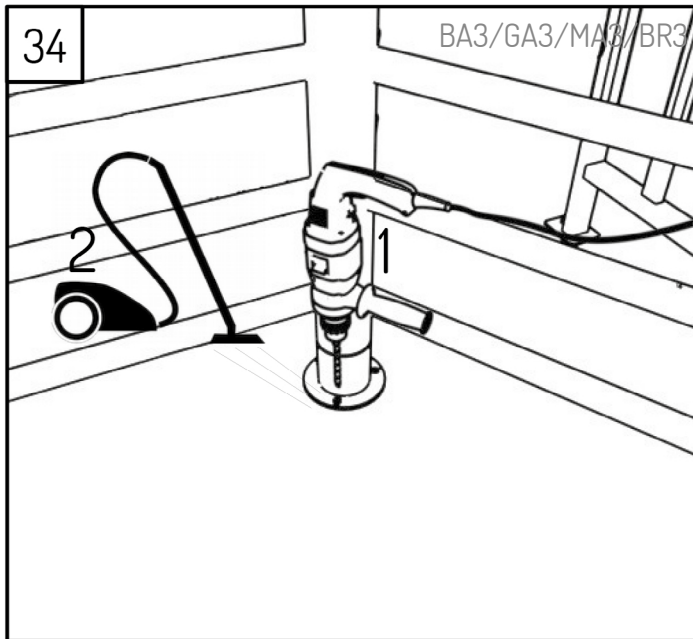
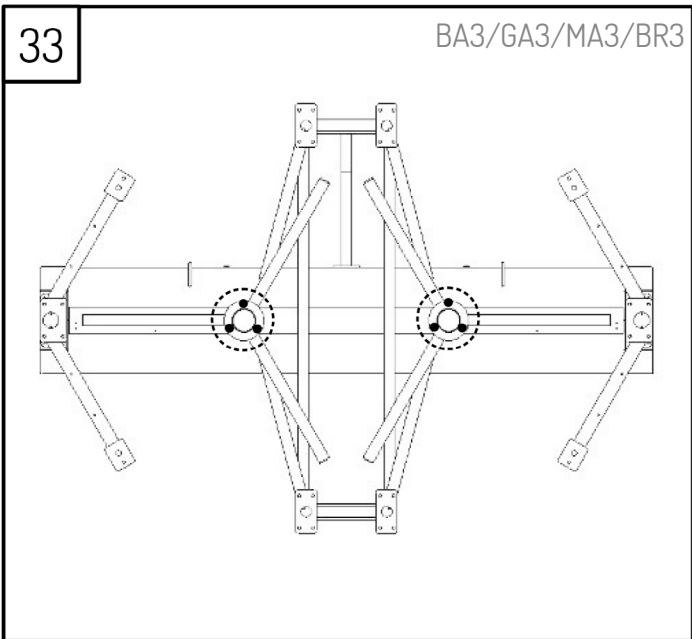
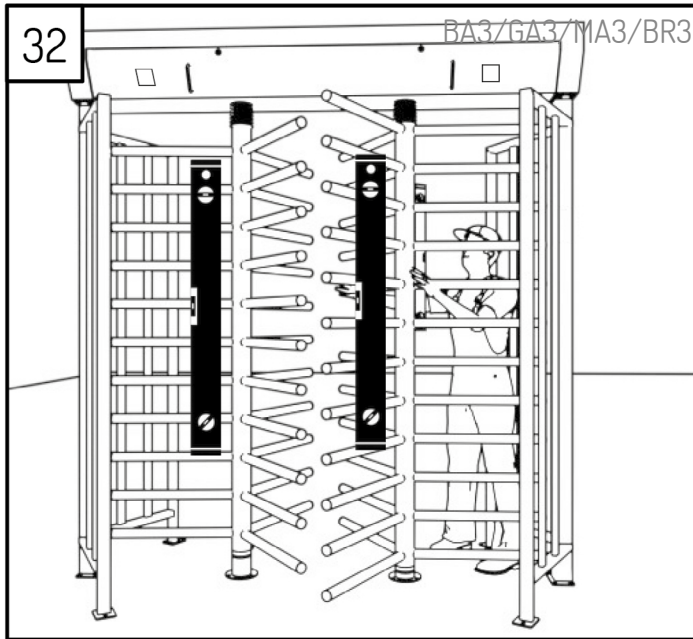
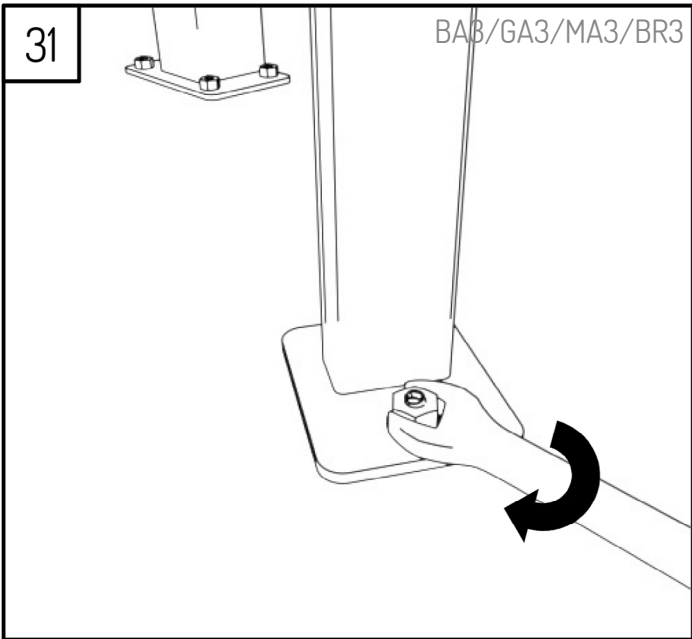
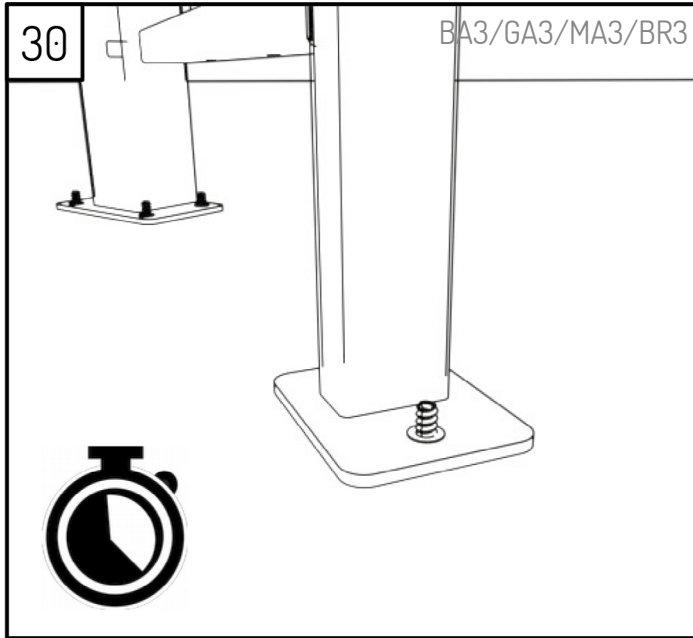
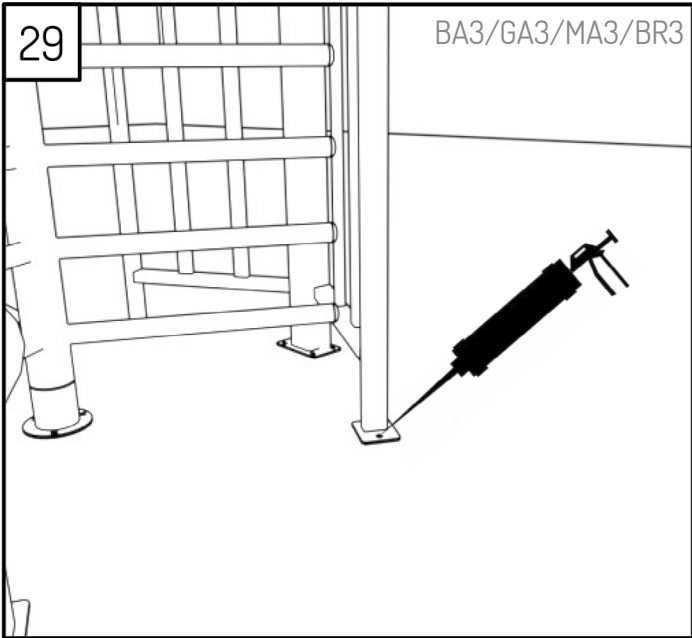
OBS! Rotor med elva ribbor ska monteras på högersidan och med tolv ribbor på vänstersidan sett från den skyddade sidan!

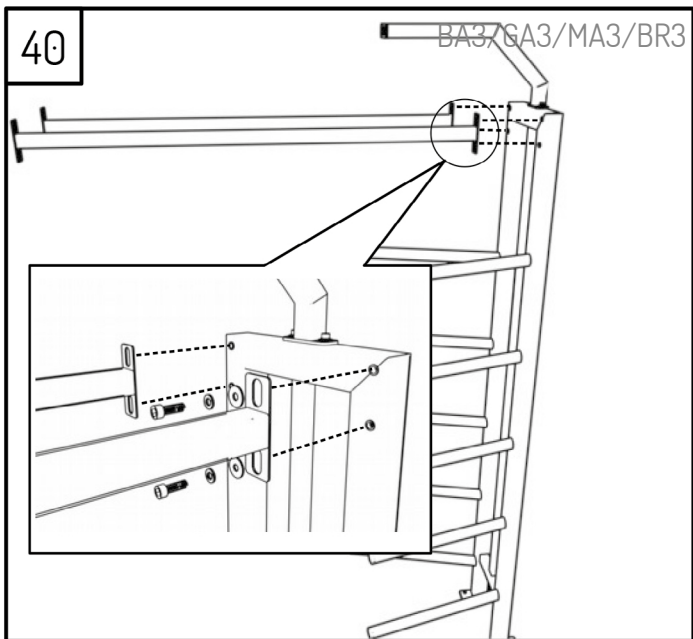
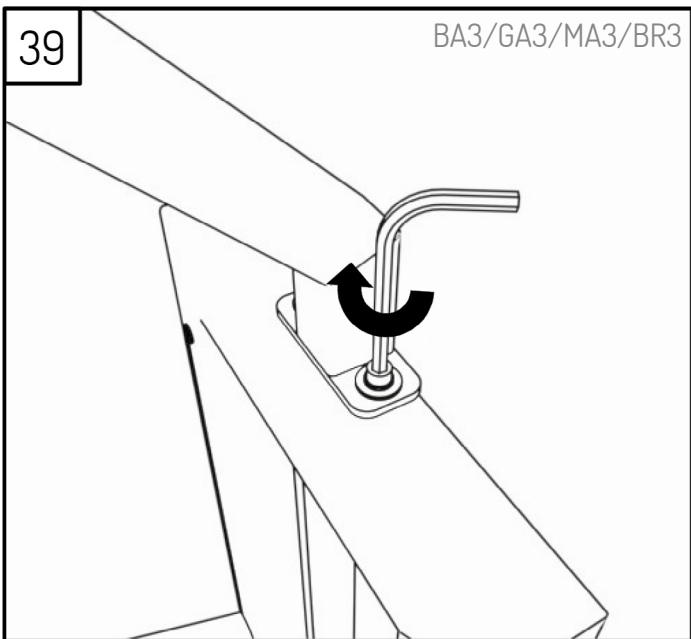
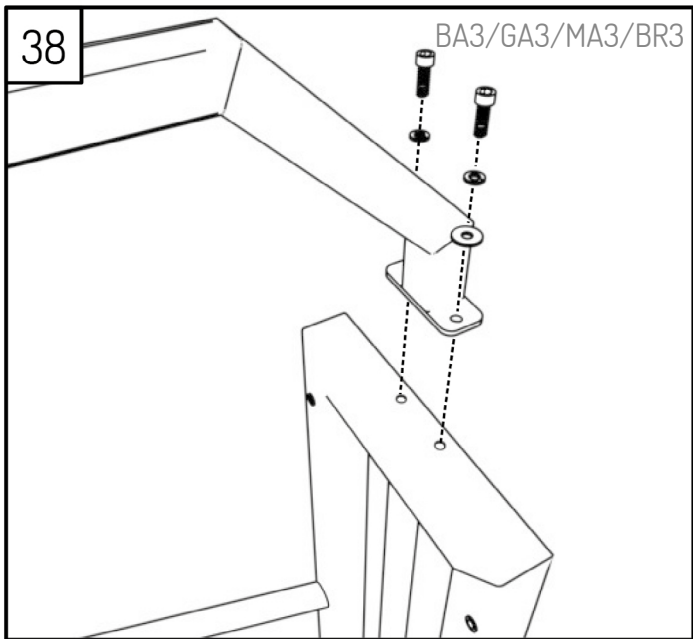
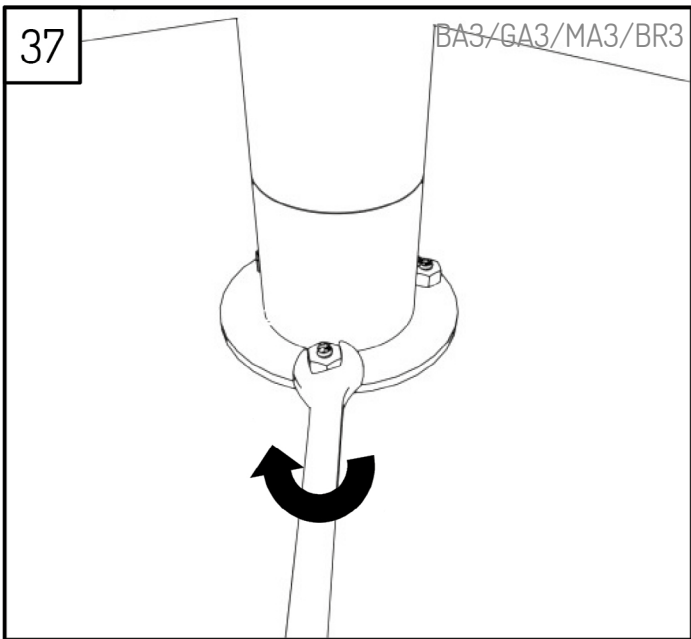
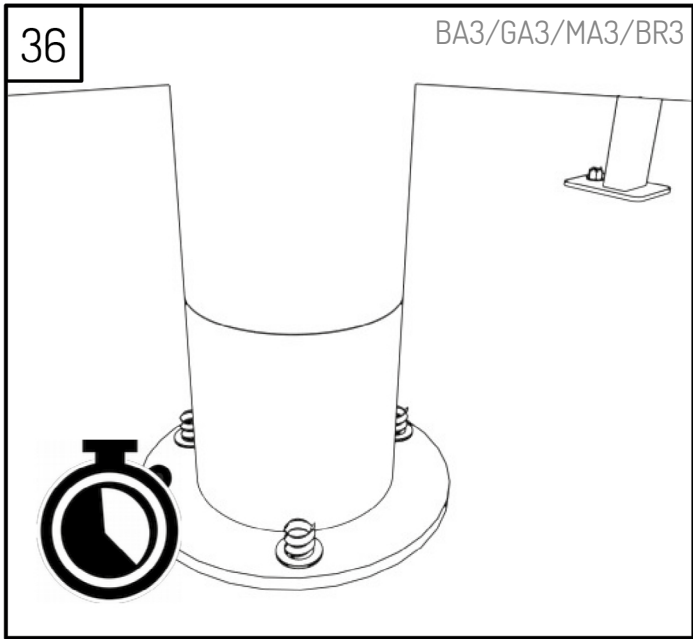
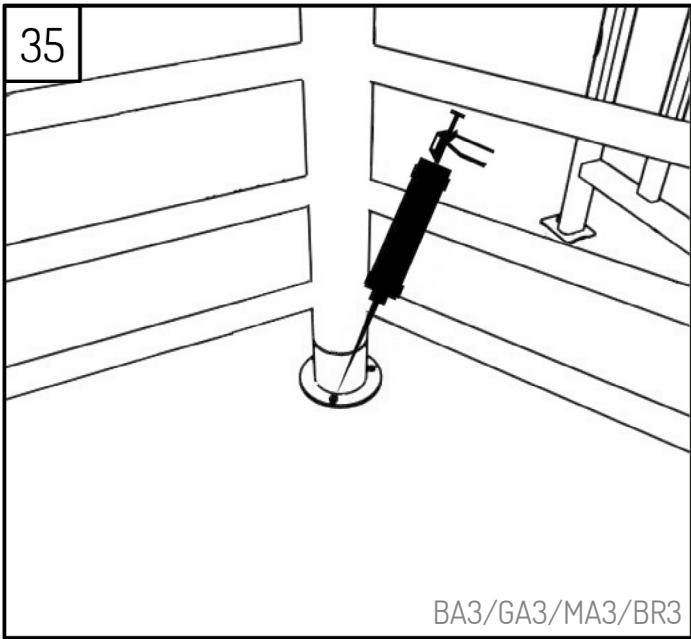
Uwaga: Rotor jedenastoramienny powinien być montowany po prawej stronie, a dwunastoramienny po lewej stronie, patrząc od strony chronionej!

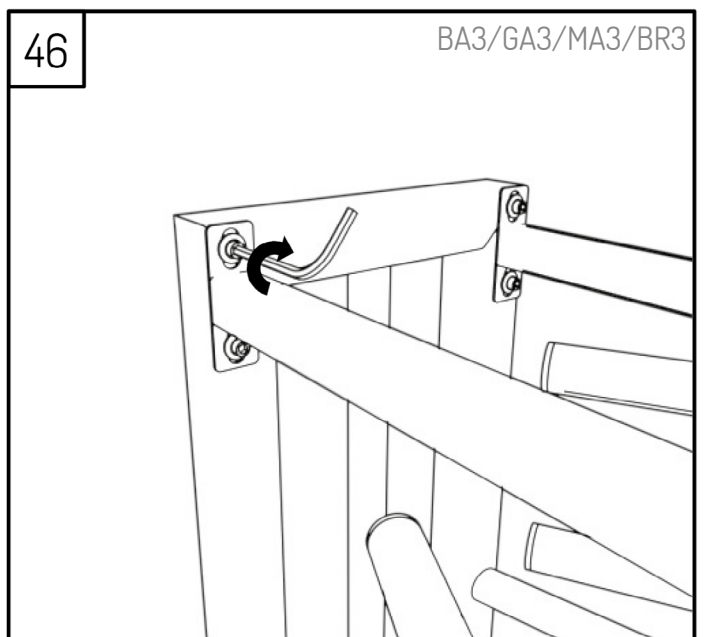
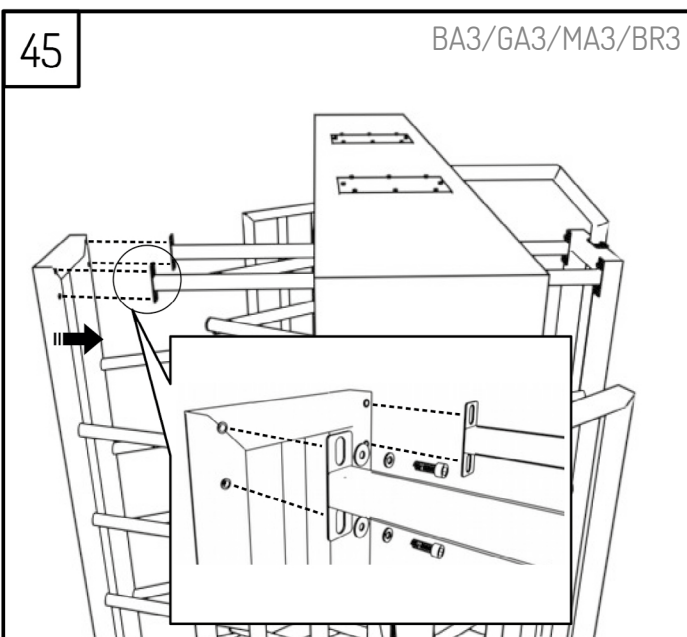
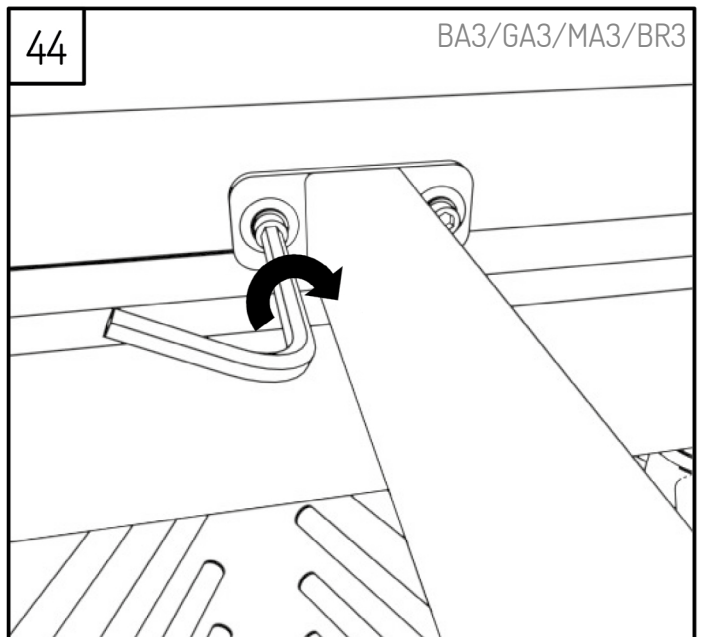
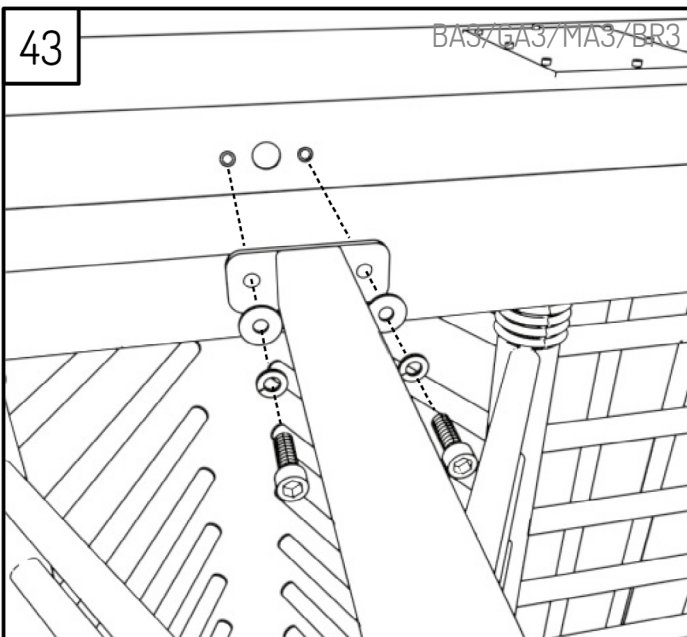
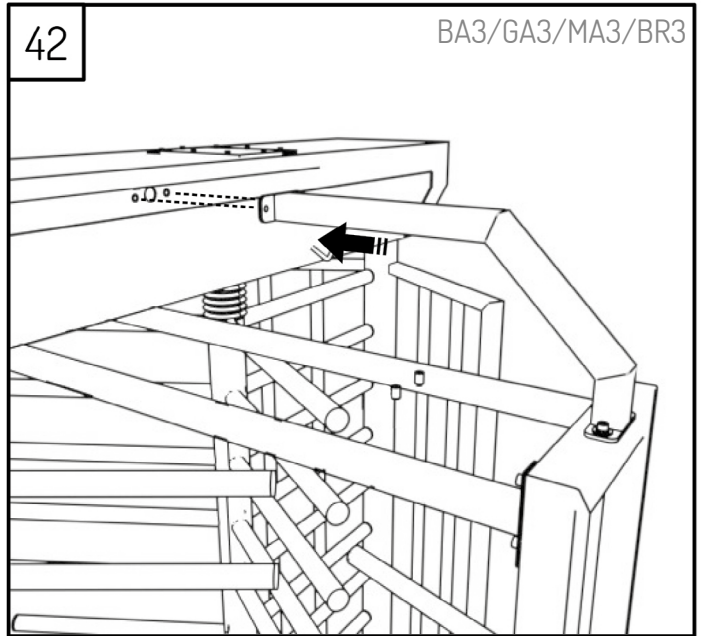
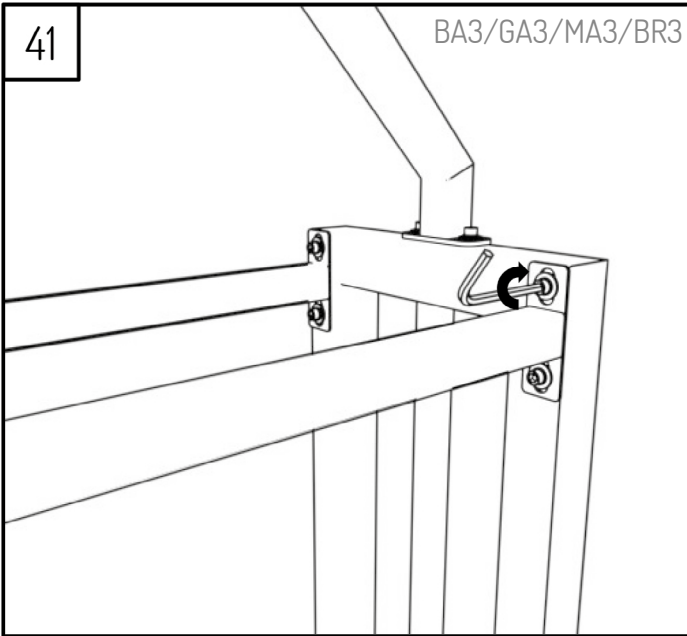


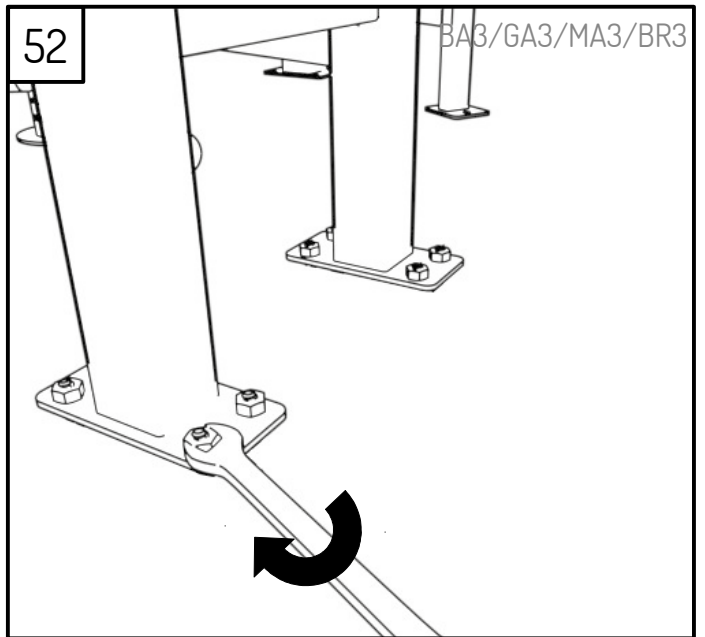
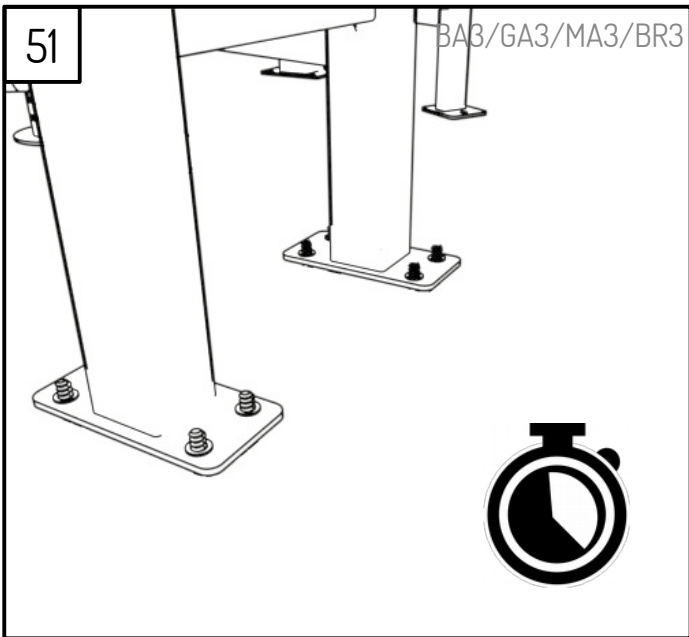
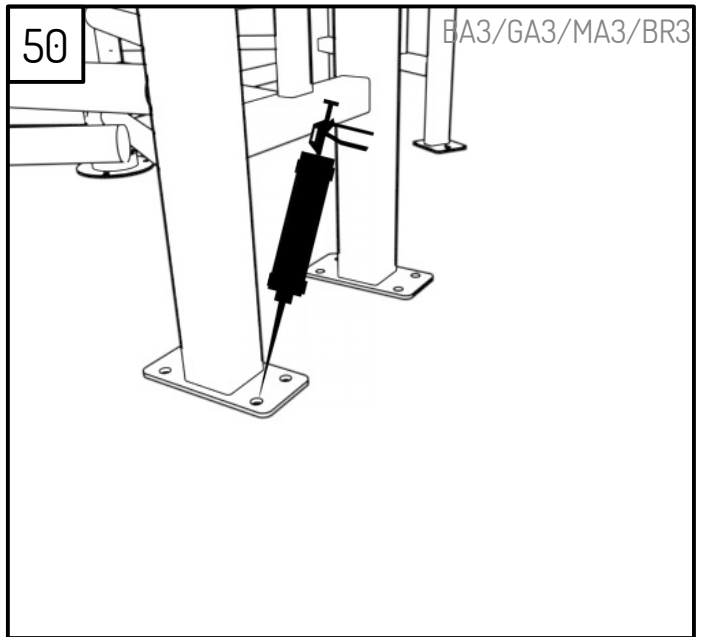
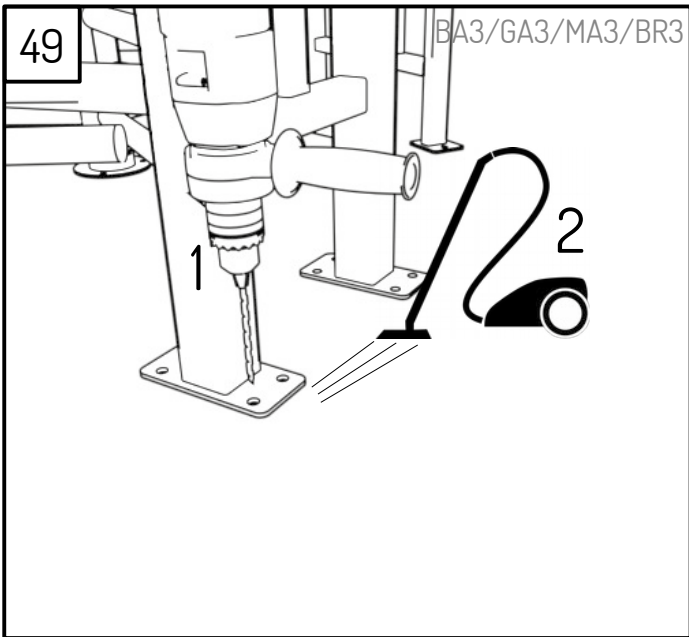
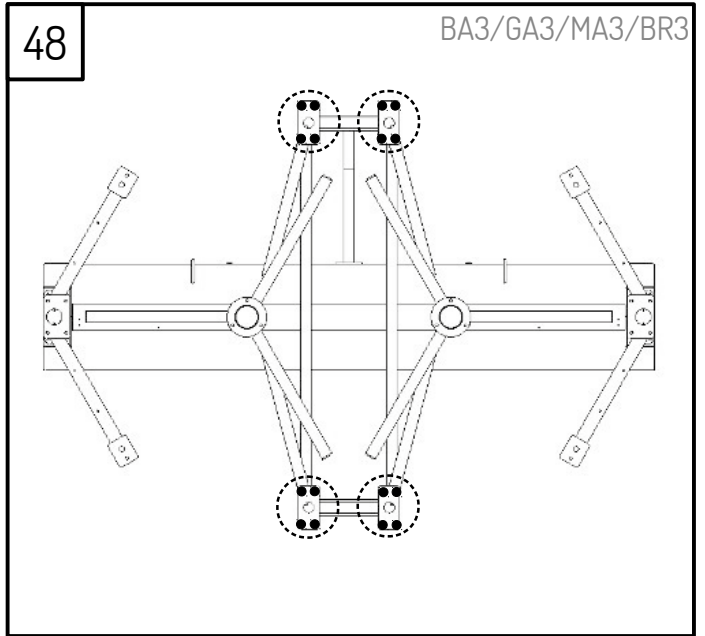
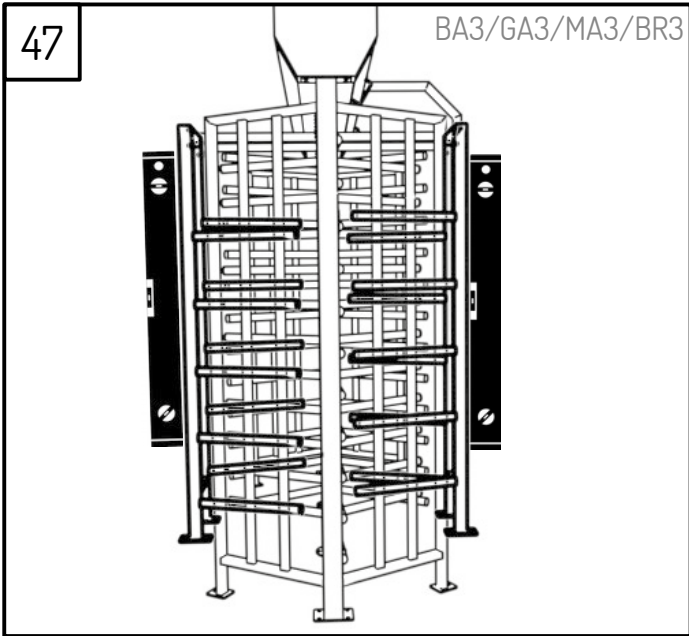


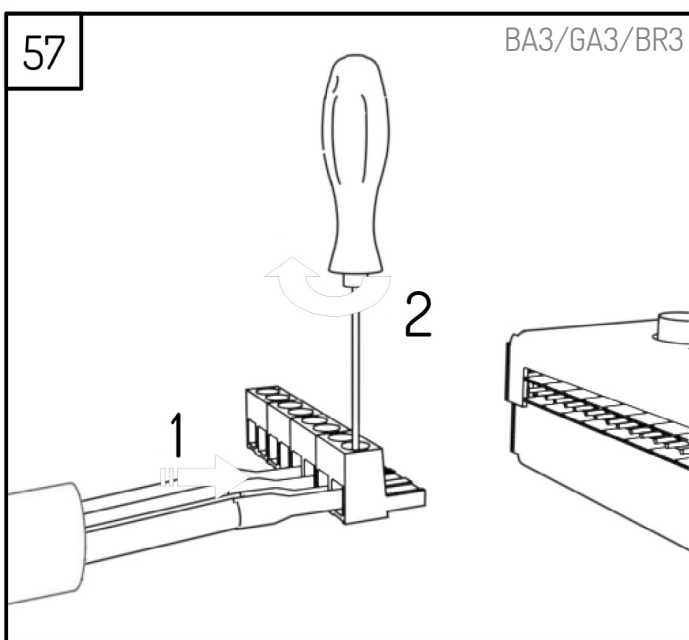
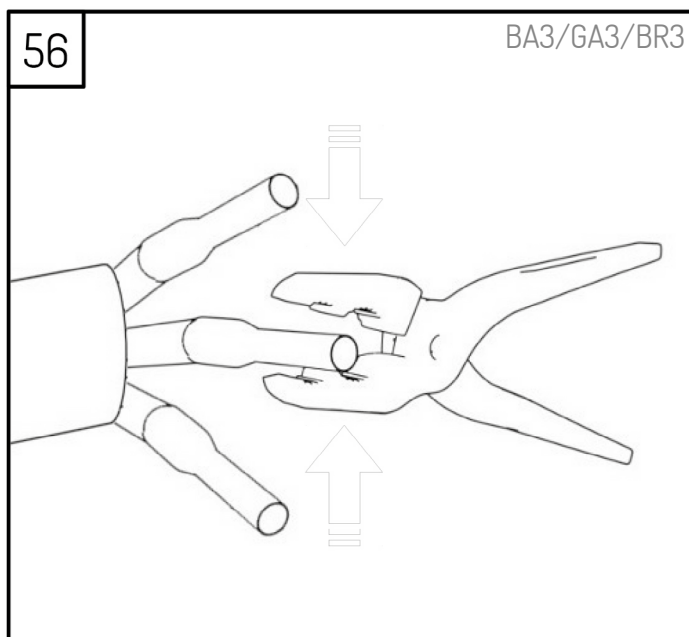
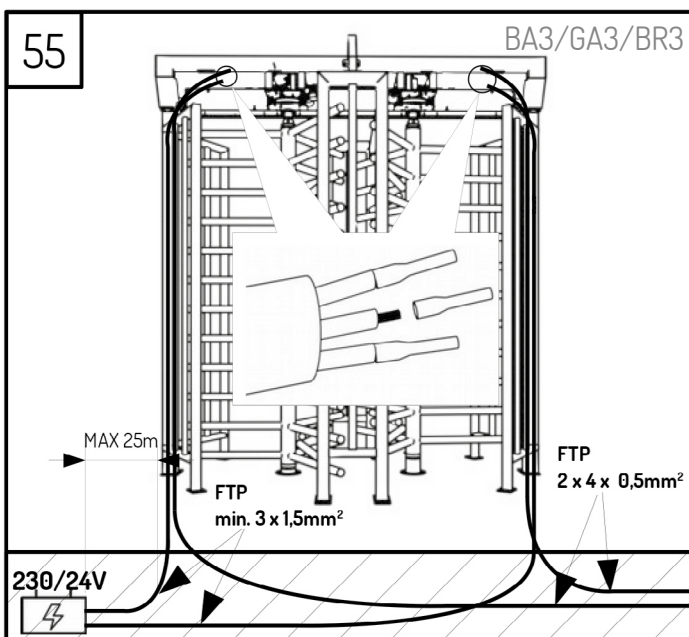
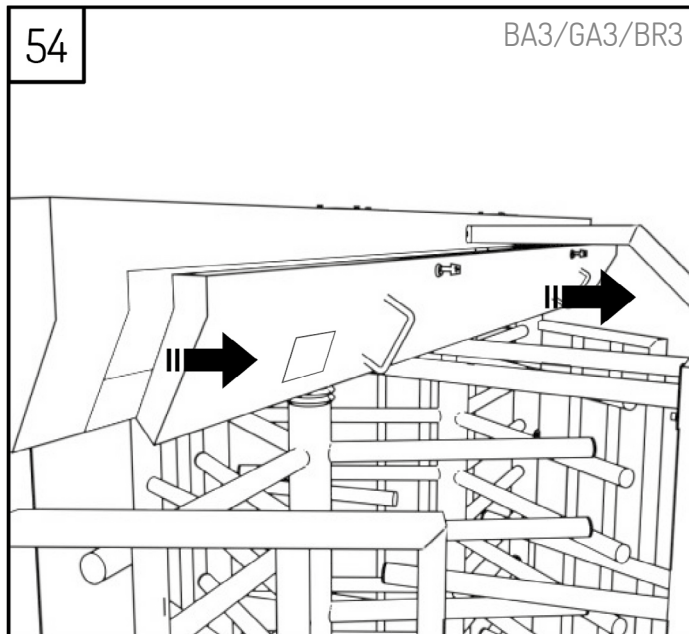
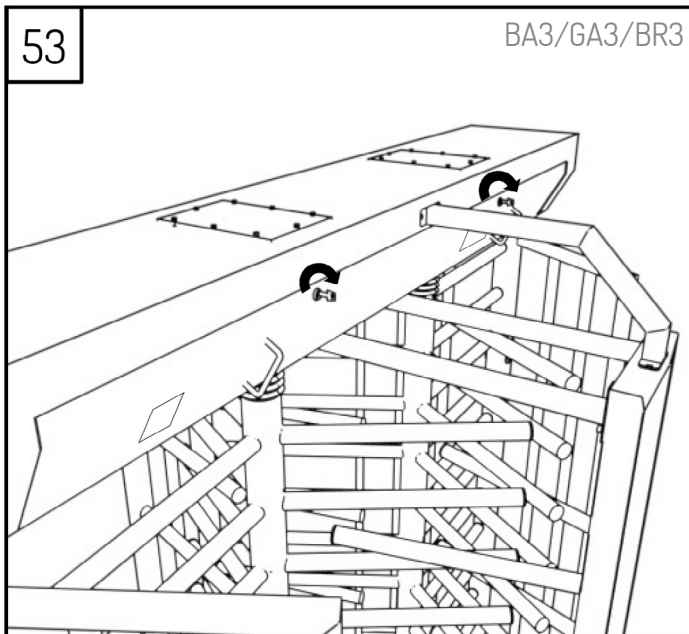






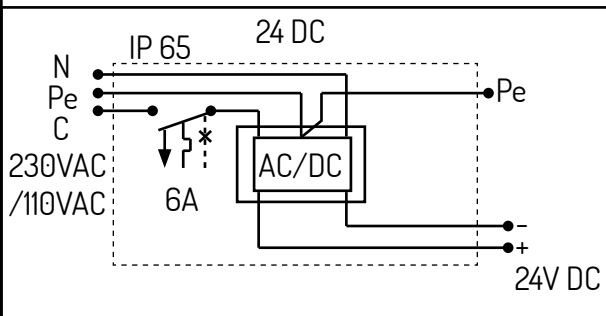
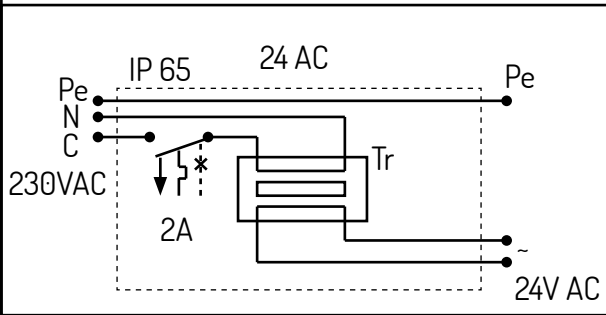




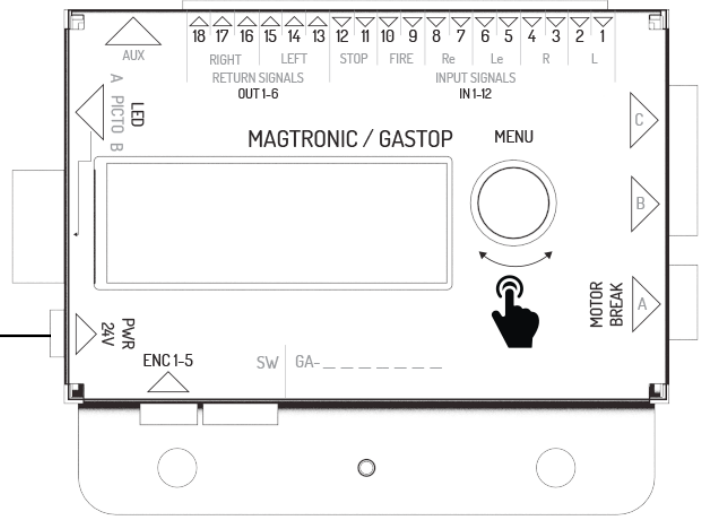


OUTER CONTROL SIGNALS

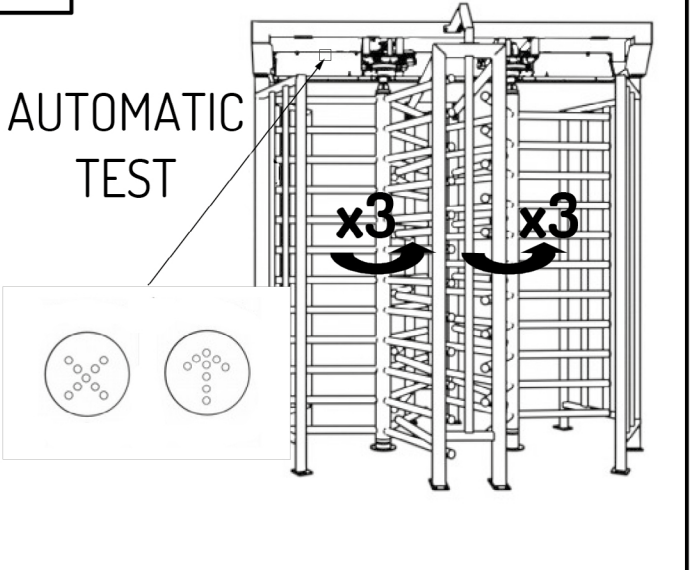
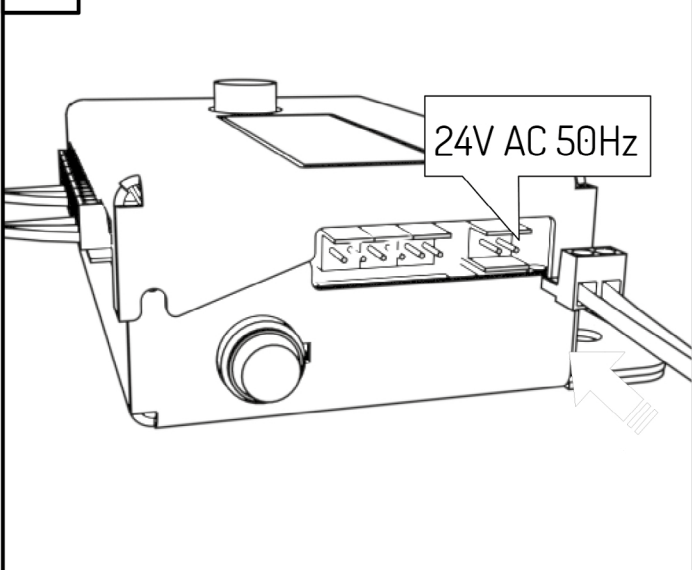
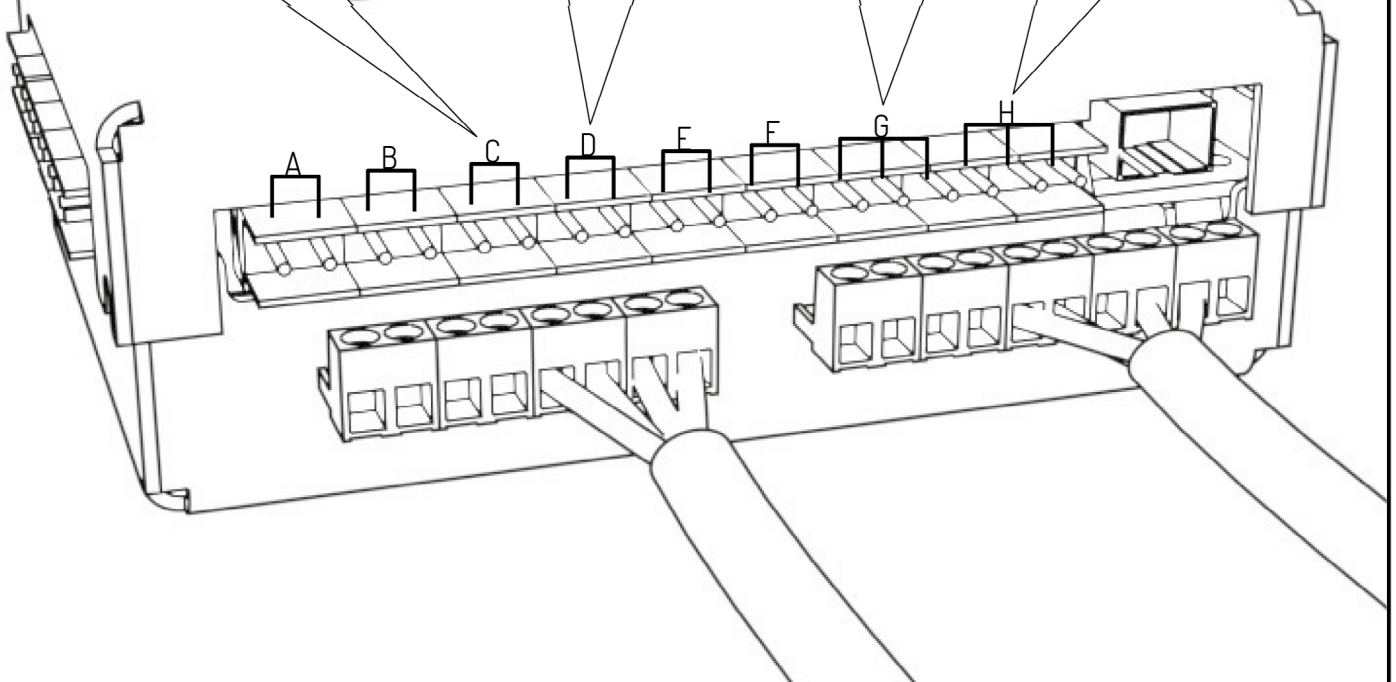
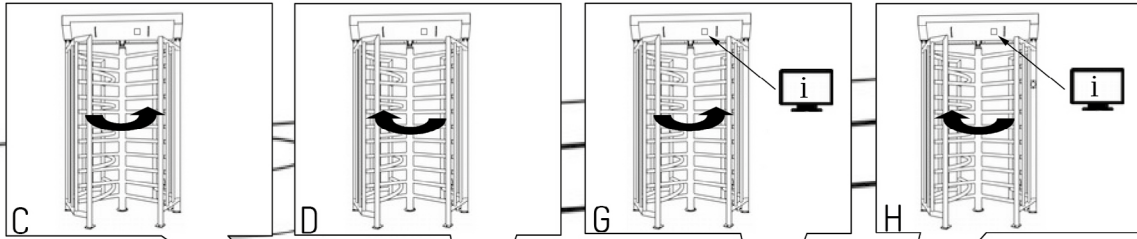
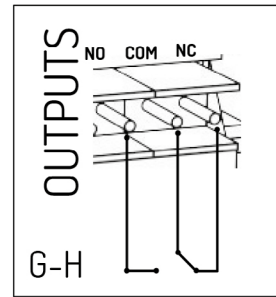
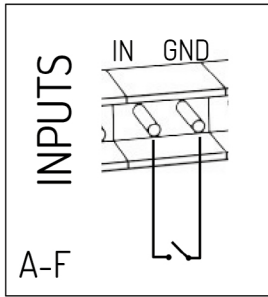
AND OUTER POWER SUPPLY

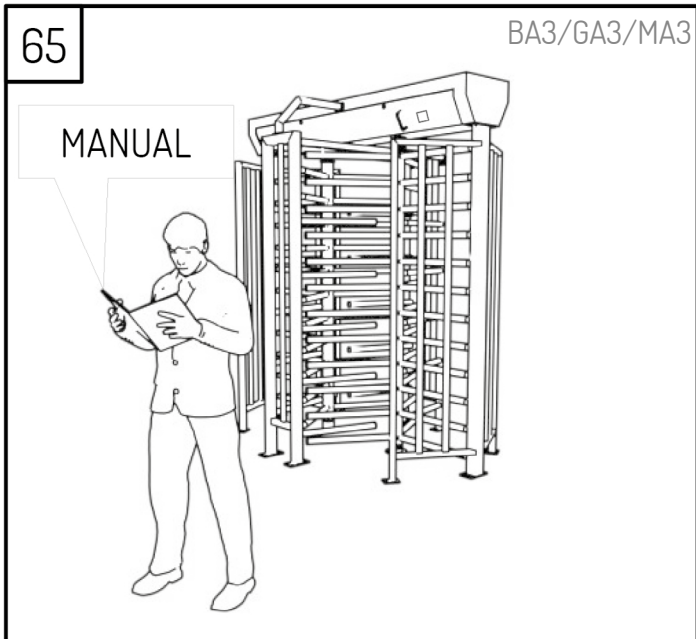
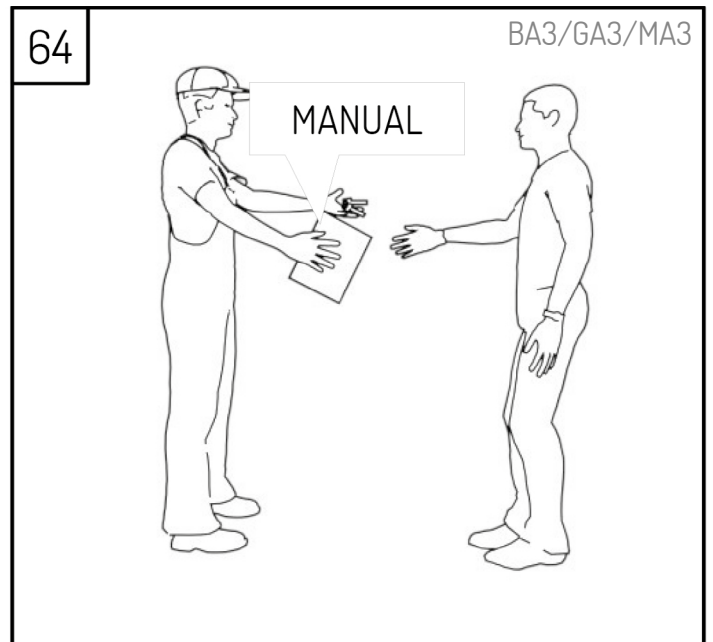
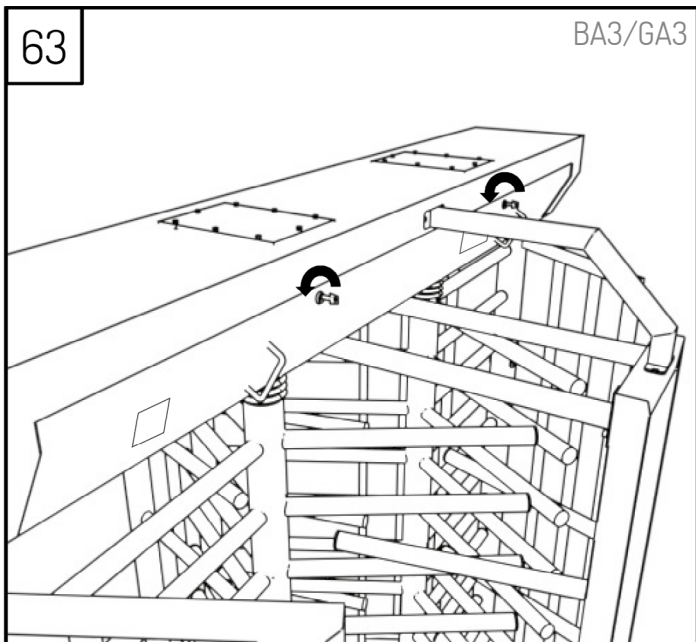
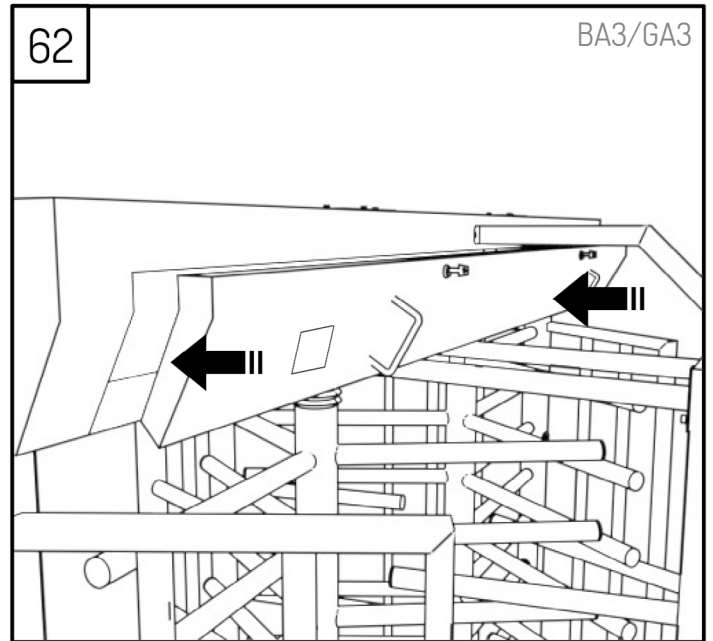
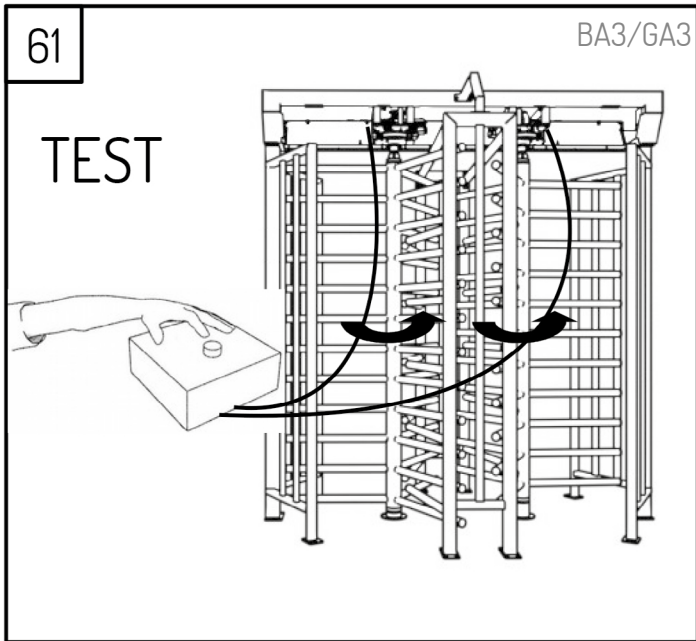


ALTERNATIVE POWER SUPPLY

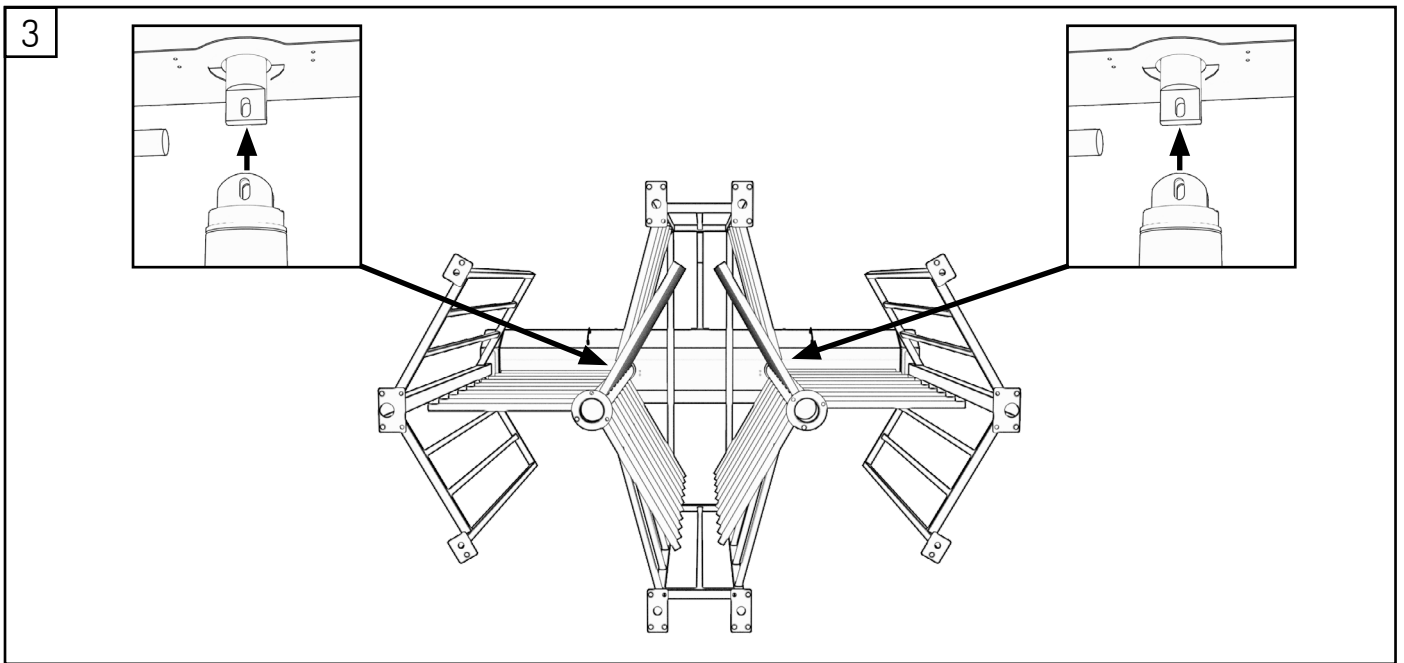
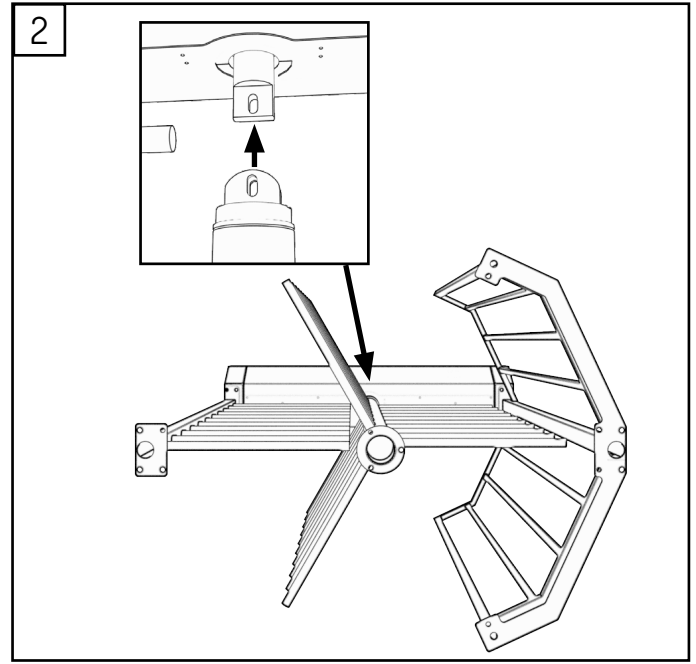
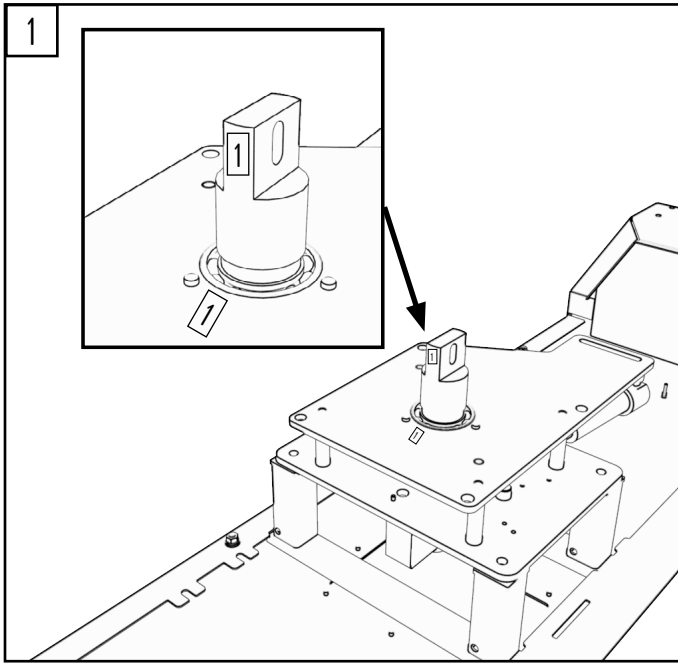


| | PIN | DESCRIPTION | ELECTRICAL INFO | CONTROL SCHEME |
|---------|-----|----------------------------------|------------------|----------------|
| INPUTS | 1 | LEFT DIRECTION - INPUT | TTL Hi/Low | |
| | 2 | GND | $I_{max} = 1mA$ | |
| | 3 | RIGHT DIRECTION - INPUT | TTL Hi/Low | |
| | 4 | GND | $I_{max} = 1mA$ | |
| | 5 | LEFT DIRECTION EN. - INPUT (LE) | TTL Hi/Low | |
| | 6 | GND | $I_{max} = 1mA$ | |
| | 7 | RIGHT DIRECTION EN. - INPUT (RE) | TTL Hi/Low | |
| | 8 | GND | $I_{max} = 1mA$ | |
| | 9 | FIRE EMERGENCY - INPUT (FE) | TTL Hi/Low | |
| | 10 | GND | $I_{max} = 1mA$ | |
| | 11 | STOP EMERGENCY - INPUT (SE) | TTL Hi/Low | |
| | 12 | GND | $I_{max} = 1mA$ | |
| OUTPUTS | 13 | LEFT RETURN - OUTPUT NO | $I_{max} = 0,5A$ | |
| | 14 | LEFT RETURN - OUTPUT COM | $I_{max} = 0,5A$ | |
| | 15 | LEFT RETURN - OUTPUT NC | $I_{max} = 0,5A$ | |
| | 16 | RIGHT RETURN - OUTPUT NO | $I_{max} = 0,5A$ | |
| | 17 | RIGHT RETURN - OUTPUT COM | $I_{max} = 0,5A$ | |
| | 18 | RIGHT RETURN - OUTPUT NC | $I_{max} = 0,5A$ | |





HOW TO CORRECTLY FASTEN ROTOR FOR GA3 SERIES TURNSTILES



DESCRIPTION OF DRAWINGS

Before starting the installation please acknowledge the complete Operation and Maintenance Manual of the device. The following shortened version of the installation manual is for presenting some important activities of the device installation process purpose only.

- A. List of the device components.
- B. Tools and objects needed while the device installation*.
 1. A knife to cut the device package.
 2. A marker to mark holes on a foundation.
 3. A set of hex wrenches.
 4. A set of flat wrenches.
 5. Pliers for electrical installation.
 6. A flat screwdriver.
 7. A drill with a Ø12mm drill.
 8. Glued in (chemical) anchor bolts.
 9. Sleeve terminals for wires.
 10. A measuring tape.
 11. A glue gun.
 12. A level.
 13. A vacuum cleaner.
 14. A ladder.
 15. A 230/24V transformer.
 16. Operation and Maintenance Manual.
 17. A key/keys to close the cover.

*Tools and objects specified in points from 1 to 15 inclusive, are not a component part of the device set.

*Two people are needed for the device installation.

- C. The device should be assembled in such a way, so that the side on which the cover lock is found is directed towards a secured side.
 1. Transportation of the devices to an installation site according to OSH regulations.
 2. Checking the installation site. Wiring should be at least 3 meters long, counting from the ground. The foundation should be levelled.
 3. Leading the wiring (steering FTP 2 x 4 x 0.5mm² and supply FTP 3 x 1.5 mm² min.) through the device legs.
 4. Leading the wiring (steering FTP 2 x 4 x 0.5mm² and supply FTP 3 x 1.5 mm² min.) through the device legs.
 5. Locating places where the pictograms are found.
 6. Unscrewing screws clamping pictograms.
 7. Disassembly of pictograms.
 8. Leading the pictograms wiring from the roof through the device legs.
 9. Connecting the wiring to pictograms.
 10. Assembly of pictograms.
 11. Re-screwing screws clamping pictograms.
 12. Installation of the roof to the device legs.
 13. Re-screwing screws clamping the roof with the device legs.
 14. Placing the device in a vertical position.
 15. Installation (placing) a rotor with eleven arms with its base.
 16. Placing a rubber cover onto the rotor and installing the rotor with the mechanism shaft.
 17. Screwing a screw clamping the rotor with the mechanism shaft.
 18. Moving the rubber cover to a place where the rotor and the mechanism shaft are connected.
 19. Installation (placing) a rotor with twelve arms with its base.
 20. Placing a rubber cover onto the rotor and installing the rotor with the mechanism shaft.
 21. Screwing a screw clamping the rotor with the mechanism shaft.
 22. Moving the rubber cover to a place where the rotor and the mechanism shaft are connected.
 23. The distance between the device legs should be same when measured at the device roof (A) and at the foundation (B).
 24. Measuring the distance between the device legs at the roof height (A).
 25. Measuring the distance between the device legs at the foundation (B).
 26. Checking the device legs level using a level.
 27. Places of drilling holes to fit the legs to the foundation (view from the top).
 28. Drilling holes in the foundation in places of the legs fitting to the foundation and then cleaning of the holes.
 29. Injecting glue to holes.
 30. Placing anchor bolts into holes filled with glue according to the glue manufacturer's recommendations. Once the glue is injected to holes, please wait the amount of time as defined by the glue manufacturer.
 31. Tightening anchors with nuts (a sealer must be placed under the nut).
 32. Checking the rotors level using a level.

33. Places of drilling holes to fit the rotors to the foundation (view from the top).
34. Drilling holes in the foundation in places of the rotors fitting to the foundation and then cleaning of the holes.
35. Injecting glue to holes.
36. Placing anchor bolts into holes filled with glue. Once the glue is injected to holes, please wait the amount of time as defined by the glue manufacturer.
37. Tightening anchors with nuts (a sealer must be placed under the nut).
38. Assembly of the gate panel elements.
39. Assembly of the gate panel elements.
40. Installation of profiles connecting panels with the gate panel.
41. Installation of profiles connecting panels with the gate panel.
42. Installation of the gate panel with the gate roof.
43. Installation of the gate panel with the gate roof.
44. Installation of the gate panel with the gate roof.
45. Installation of the gate second panel with the rest of a structure.
46. Installation of the gate second panel with the rest of a structure.
47. Checking the rotor level using a level.
48. Places of drilling holes to fix panels to the foundation (view from the top).
49. Drilling holes in the foundation in places of panels fitting to the foundation and then cleaning the holes.
50. Injecting glue to holes.
51. Placing anchor bolts into holes filled with glue. Once the glue is injected to holes, please wait the amount of time as defined by the glue manufacturer.
52. Tightening anchors with nuts (a sealer must be placed under the nut).
53. Placing a key in a cover lock and turning it 90 degrees right.
54. Opening the device cover
55. Preparing an external wiring to install into a terminal strip. Placing a sleeve terminal onto a conductor of a cable (type of supply cables: FTP 3 x 1.5 mm²min., type of steering cables: FTP 2 x 4 x 0.5mm², distance between the device and the transformer should be no more than 25 meters).
56. Tightening the sleeve terminal on a wire using pliers for electrical installation.
57. Installing the wire in a correct place on the terminal strip.
58. Connecting basic signals to controllers. A detailed description of connections can be found in the devices Operation and Maintenance Manual.
59. Plugging controllers to the power supply.
60. Automatic test testing the device efficiency.
61. A test performed with the use of an external device (e.g. a button).
62. Placing the device cover back.
63. Placing a key in a cover lock and turning it 90 degrees left.
64. Commissioning of the Operation and Maintenance Manual and keys to the device cover to the device operator/owner.
65. Acknowledging the Operation and Maintenance Manual by an operator supervising the device operation.