

# **SECTIONAL GARAGE DOOR**

## ASSEMBLY INSTRUCTIONS

APPLIES TO REDCROSS AND ART DECO GARAGE DOORS WITH LOW LINTEL

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/ERSION: 022017





#### **I INTRODUCTION**

This instructions refers to the assembly of **VERDOOR** sectional garage door, which is designed to be used in single family houses. The door is not designed for a continuous operation.

The assembly inconsistent with the instructions and not following the recommendations of the manufacturer will constitute the basis for the exclusion of all warranty claims.

The manufacturer reserves the right to introduce changes concerning the technical characteristics of this product.

#### **II SAFETY CONDITIONS**



Warning: The instructions are designed only for well-trained assemblers of garage door and can be used only for the purpose of assembling the VERDOOR garage door.

- In order to guarantee safety before starting the assembly one shall read the instructions and check the compliance of delivered elements with the list of parts supplied with the door.
- The instructions describe the assembly of the VERDOOR garage door set.
- The delivered elements constitute a set for the given door model. The instructions describe the assembly of delivered VERDOOR garage door of the Redcross and Art Deco models.
- Warning: using additional parts or not assembling all delivered parts may influence the functioning of the door, may be dangerous and poses a risk of the exclusion of warranty.
- Take special attention while assembling the garage door: The garage door is a heavy, massive device and some of its assembly elements have sharp edges.
- Attention: The person tensioning the springs shall be especially careful while doing it.
- Before first use of the door one shall check if the door is properly balanced. After opening it to half of its height it should stay in this position. Due to the lack of proper balancing the door may drop down by itself.

#### **III CONDITIONS OF GARAGE DOOR ASSEMBLY**

- The door should be assembled and used according to its designation.
- The assembly of the garage door should be conducted using proper tools. The garage door is a mechanical device and its assembly requires taking special care.
- The garage door should be firmly fitted to the walls (shear walls, walls made of bricks, wooden walls or steel frames)
- · All surfaces inside the room should be finished
- It is forbidden to assembly the door in a room where finishing works will be conducted (plastering, grinding, painting). During those works
  the door may be damaged.
- The rooms in which the garage door will be assembled shall be clean and dry. In case of using gypsum plaster one shall make sure that humidity of the surface to which the elements of the door will be fitted not exceed 2%. Wet plaster is highly corrosive.
- The door parts shall not stay in contact with aggressive agents including constructive chemistry as their surfaces and anticorrosion
  protections might be damaged.
- The walls of the room shall be even. The headwall shall face the lintel and be perpendicular to the floor.
- The floor at the point where it meets the bottom gasket should be even, levelled and has a water discharge.
- The installation of electric drive shall be performed according to the assembly instructions of the drive.

#### IV ASSEMBLY INSTRUCTIONS OF THE GARAGE DOOR WITH TORSION SPRINGS

**IMPORTANT:** Before assembling, please checks the opening dimensions (width x height x) and compare with the door delivered.





- 1
- Fix the mounting angles with guides to side walls of the opening.
- Fix the angles in a stable manner by using raw plugs depending on the type of material of which the door is made. Using improper plugs may damage the door and exclude the warranty.
- Make sure that the angles are assembled parallel and pay attention to the angles width which should be 110 mm wider than the length of the door panel.



4 In case of any doubts or difficulties with assembling please contact the technical department of the manufacturer.





OPTION - Mounting the gasket on the lintel Lintel supported by polystyrene



OPTION - Mounting the gasket on the lintel







Fix the horizontal guides to mounting angles.



• After fixing the horizontal guides check diagonals and width of guides (phot. A)

3

• Fix the guides to the ceiling or side walls using perforated angle and appropriate raw plugs depending on the type of material of which the ceiling was made.







Assemble the drive shaft depending on the model of the garage door, with one or two spring alleviating the weight
of the door.

4

• One shall follow the colour identification of drums (view from inside - red wheel L on the left, black wheel R on the right) and springs while putting them on the shaft.







Mount the complete shaft on the ends of horizontal guides.



Fix the bottom handles with string and roller on which we put a spacer to the bottom panel of the door. In case of garage door bigger than 9 m<sup>2</sup>, use a device protecting against the string breakage (option) instead of the bottom handle.

6



Assemble other panels of the door. Pay attention to leave some clearance between panels and choose appropriate length of bolts delivered by the manufacturer in accordance with the specification.

Attention: Using different type of bolts may cause exclusion of the warranty.







Fix upper handles with a roller. The roller should contact the bottom edge of the guide.



12 In case of any doubts or difficulties with assembling please contact the technical department of the manufacturer.







9

Wrap the strings on the drums by locked shaft. Be sure that there is at least one free turn of the string on the drum while the door is in the closed position.

Attention: the strings shall be equally tensioned. After wrapping the strings, block the wheels.



10 Tension the springs according to the item of the instructions specifying the rules for tensioning torsion springs.





Mount the side bolt or central locking (option) and handle for lifting the door.



OPTION - The door with central locking - fixing the handle for lifting the door.

B





C

OPTION - door with a slider - fixing a handle for lifting the door



OPTION - Door with an automatic device - fixing the handle for lifting the door

D

Handle mounted on the second bottom panel in the area of reinforcement of the horizontal panel.





12 In case of mounting the automatic device for lifting the door, the side bolt or central locking has to be locked in a open position.



OPTION - In case of garage door wider than 4500 mm of the width one shall fix panel reinforcements.



A

#### **V RULES FOR TENSING THE TORSION SPRINGS**



Warning: The person tensing the springs should be trained in this field. The assembler should be especially careful while performing this activity.

Before you start tensioning the strings, please check the fitting of the fixed part of the spring.

While tensioning the springs, the drive shaft should be immobilized.

Tensioning the springs should be performed using steel rods with diameters suited for spring heads. Tensioning shall be made by 1/4 turn by turning the spring up. While tensioning enter the bar into the opening of the spring head and rotate it to such an angle that the other bar can be entered easily. Remove the first bar and then rotate the spring by using other bar. Repeat this operation until the spring is fully tensed. The number of turns needed in each type of door are specified on the identification label.

After tensioning the spring it shall be blocked using bolts located in the movable spring head.

After blocking the tensioning bars shall be removed. Repeat with the other spring.

While tensioning the spring will be getting longer and will change it diameter.

One shall check the tension of spring and adjust if needed.

#### **VI FINAL REMARKS**

**The proper assembling** of the door shall by checked by opening and closing the garage door few times. Please pay attention to silentrunning, balancing in intermediate positions, tightness, correct and permanent fitting the door elements to walls and ceiling and proper functioning of all movable parts of the door and also to proper folding of the panels while opening and closing the door. The garage door assembled in a proper manner should move smoothly and with a low resistance. Any faults shall me removed **immediately**.

**ATTENTION:** After assembling the garage door you shall remove the protective film from the panels (within two weeks from the day of assembling). Otherwise, as a result of the influence of the sunlight, the film will stick to the panel of the door. Not following this recommendation may cause a damage to the paint coat while trying to remove the film.

#### In case of any question please contact the nearest Dealer or VERDOOR technical department.

#### **VII DESCRIPTION OF THE PARTS**

- 1. Angles with vertical guide
- 2. Horizontal guides
- 3. Perforated angle for suspension
- 4. Raw plugs for fixing the console
- 5. Raw plugs for fixing the angles
- 6. Screws for joining guides, washers, nuts
- 7. Screws for joining the guide with the suspension, washers, nuts
- 8. Side consoles of the shaft
- Spring console (console with a device protecting against the breakage of springs)
- 10. Drive shaft
- 11. Springs
- 12. Pulleys
- 13. Fitting of the shaft
- 14. Screws for joining side consoles, washers, nuts
- 15. Screws for joining the consoles with springs, washers, nuts

- 16. Bottom handles
- 17. Upper handles
- 18. Side hinges
- 19. Middle hinges
- 20. Rollers
- 21. Slider
- 22. Strings
- 23. Bolts 6,3 x 16 mm for hinges and handles
- 24. Handle for lifting the door
- 25. Central locking (optional)
- 26. Protection against string breakage (optional)
- 27. Rear bar
- 28. Medium wheel
- 29. Panel reinforcements



NOTES

#### NOTES

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