>MOVING LIFE

MANUALE D'USO E MANUTENZIONE
USE AND MAINTENANCE MANUAL
BEDIENUNGS - UND WARTUNGSANLEITUNG
MANUEL D'EMPLOI ET D'ENTRETIEN
MANUAL DE USO Y MANTENIMIENTO

BIG

Motoriduttore per cancelli scorrevoli ad uso industriale
Sliding Gate Operator – Industrial
Schiebetorantrieb für Gewerbe und Industrie
Automatisme pour Portails Coulissants – Usage Industriel
Accionador para Puertas Correderas – Uso Industrial

D_MNL0BIG 17-04-2018 - Rev.18

IT - Istruzioni originali

MADE IN ITALY

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MANUFACTURER'S DECLARATION OF INCORPORATION
(in accordance with European Directive 2006/42/EC App. II.B)

ENGLISH

Manufacturer:	TAU S.r.l.
Address:	Via E. Fermi, 43 36066 Sandrigo (Vi) ITALY

Declares under its sole responsibility, that the product:	*Electromechanical actuator*
designed for automatic movement of:	*Sliding Gates*
for use in a:	*Industrial*
complete with:	*Electronic control unit*

Model:	*BIG*
Type:	*BIG18QI / BIG30QI / BIG40Q*
Serial number:	*SEE SILVER LABEL*
Commercial name:	*AUTOMATION FOR SLIDING GATES*

Has been produced for incorporation on an access point (*sliding gate*) of for assembly with other devices used to move such an access point, to constitute a machine in accordance with the Machinery Directive 2006/42/EC.

Also declares that this product complies with the essential safety requirements of the following EEC directives:
- ***2014/35/EU Low Voltage Directive***
- ***2014/30/EU Electromagnetic Compatibility Directive***

and, where required, with the Directive:
- ***2014/53/EU Radio equipment and telecommunications terminal equipment***

Also declares that ***it is not permitted to start up the machine*** until the machine in which it is incorporated or of which it will be a component has been identified with the relative declaration of conformity with the provisions of Directive 2006/42/EC.

The following standards and technical specifications are applied:
EN 61000-6-2; EN 61000-6-3; EN 60335-1; ETSI EN 301 489-1 V1.9.2; ETSI EN 301 489-3 V1.6.1;
EN 300 220-2 V2.4.1; EN 12453:2000; EN 12445:2000; EN 60335-2-103

The manufacturer undertakes to provide, on sufficiently motivated request by national authorities, all information pertinent to the quasi-machinery.

Sandrigo, 29/11/2017

Legal Representative

Loris Virgilio Danieli

Name and address of person authorised to draw up all pertinent technical documentation:

Loris Virgilio Danieli - via E. Fermi, 43 - 36066 Sandrigo (Vi) Italy

INSTALLATION

The product may only be installed by a qualified fitter. The manufacturer, Tau, declines all liability for damage to property and/or injury to people deriving from the incorrect installation of the system or its noncompliance with current law (see Machinery Directive).

Use on gates with a gradient or slope is not allowed.

FIG. 1 - STANDARD SYSTEM

1. Gear motor
2. Release
3. Photocells
4. Posts + Photocells
5. Aerial and Flashing light
6. Key switch
7. Electromechanical edge
8. Gate guide
9. Limit switch shoe
10. Rack

FIG. 2 - INSTALLATION MATERIAL

1. gear motor
2. counterplate
3. rack
4. self-tapping screws
5. limit switch shoes
6. release key
7. rack brackets
8. bent pins for counterplate

Place the control unit (external versions) in the immediate vicinity of the motors.

Be careful not to run cables for auxiliary devices inside raceways housing other cables supplying power to large loads or lights with electronic starters.

In the event control pushbuttons or indicator lights are installed inside homes or offices several metres from the actual control unit, it is advisable to decouple the signal by means of a relay in order to avoid induced interference.

OVERALL DIMENSIONS

Figs. 3,4,5 show the main overall dimensions for the sliding gate; figs.6-7 show the dimensions of the foundation counterplate, while fig.8 shows the dimensions of the adjustable counterplate for model BIG18.

PRELIMINARY OPERATIONS

Carefully read the instructions contained in the handbook before starting work.
Before proceeding with installation, make sure that all the components are present, use suitable work equipment and do not touch live electrical parts.

CONSIDERATIONS PRIOR TO INSTALLATION

Before proceeding with installation check that:

- The wheels of the gate are mounted in such a way as to make it stable and that they are in good condition and perfect working order;
- The whole of the slide rail is unobstructed, straight and clean and a travel stop is fitted at either end.

INSTALLATION DISTANCES

To install the gear motor correctly, make sure it is at a distance of 65 mm from the gate.
See fig. 09 for fixing to a concrete floor, fig. 10 for digging and fig. 11 for positioning the counterplate.

PREPARING THE BASE

Dig foundations at least 15 cm deep and sufficiently wide. Use protective sheaths for the cables.

FIXING THE FOUNDATION COUNTERPLATE

Fill the hole with concrete and sink the bet pins into it; the counterplate must be perfectly flat at 1 or 2 cm from the level of the finished floor and at a distance of approximately 65 mm from the gate.
NB: it is also possible to install the gear motor without the foundation counterplate by using four foundation bolts on a flat concrete base; the measurements shown in fig. 9 must always be respected.
A height-adjustable counterplate may be used for model BIG18; in this case, the fixed bent pins must be welded to the rail, see fig. 12/a. This makes it possible to adapt the gear motor to a pre-existing system; the measurements shown in fig. 12/b must be respected.

ANCHORING THE GEAR MOTOR

Tighten the screws (as shown in fig. 13) on both sides of the gear motor. Fit all the cables into the sheath, which passes through the hole made in the base of the foundation counterplate.

FIXING THE RACK

Prepare the rack with the relative brackets (fig. 14).
Place the rack on the motor pinion (released) respecting the distance between the tooth of the gear and the tooth of the rack as shown in fig. 15. Make a hole in the leaf at the centre of the slot and fix with the relative screws. Slide the leaf along the pinion and fix each bracket in turn.

FIXING AND ADJUSTING THE LIMIT SWITCH SHOES

Fix the shoes as shown in fig. 16, one near either end of the rack. Move the leaf by hand and position the shoes so that they touch the microswitch lever just before the leaf hits the travel stops at both ends of the rail; then tighten the screws.

A single factor or combination of factors (thermal expansion, climate, frequency of use, etc.) may result in the position the gate stops in changing over the course of the day, both when opening and when closing. Consequently, we cannot guarantee that the gate will always stop in the same position.

ADJUSTING THE MECHANICAL CLUTCH

Before starting, make sure to disconnect the gear motor from the power supply.

BIG18: Make a 1/2 or a whole turn at a time using the supplied wrench (fig. 17).

BIG30-40: After removing the lock nut (1 fig. 18A) and the stop dowel (2 fig. 18A), adjust the thrust force using the hex wrench provided (3 fig. 18B) (rotate clockwise to increase the thrust force, rotate counter-clockwise to decrease it). After adjusting as needed, reassemble the stop dowel (2 fig. 18D) until it reaches the mechanical stop, then fasten the lock nut (1 fig. 18D).

VERSION WITH CHAIN PINION: R30 / R40

The door can also be power-operated as shown in fig. 19. Pass the chain as shown in fig.
Fig. 19 also shows the type of chain required (pitch 5/8” x 3/8”).

ELECTRICAL CONNECTIONS

For electrical connection, please refer to the specific instructions for each electrical control panel. The following tips apply to all models. Do not put the power cables in the same sheath as the motor cables. Always choose the shortest routes for the cable lines. Make sure the equipment is well earthed. A general switch should be

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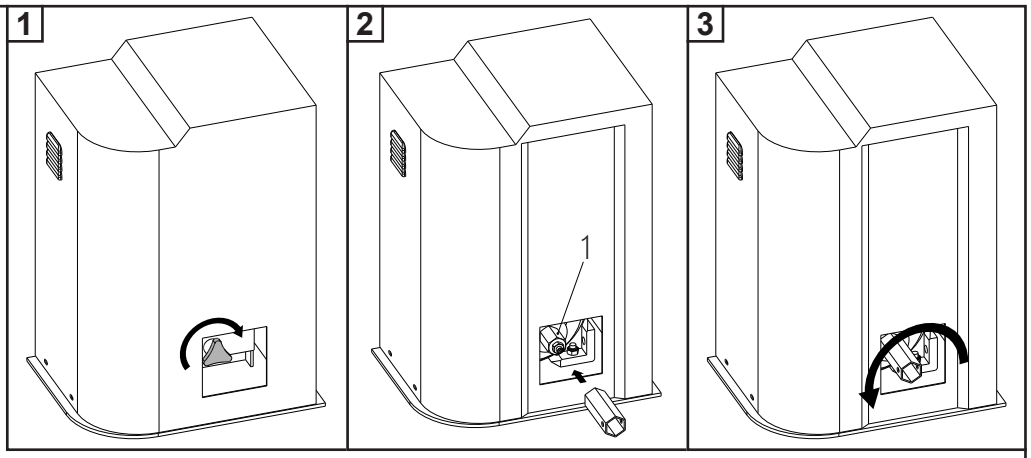
User Guide

MANUAL OPERATION
In case of blackout, place the key in the lock and turn it. Remove the casing to access the release mechanism. Turn the handle clockwise to release the automation for model BIG18 as shown in Fig. 1. Using the hex wrench provided, rotate the release assembly counter-clockwise at least one complete turn for models BIG30 and BIG40 (fig. 3). To restore normal operation, simply tighten the release assembly (1 fig. 2) by screwing it in until it reaches the mechanical stop.



INSTRUCTIONS AND WARNINGS FOR AUTOMATIC SYSTEM USERS

CONGRATULATIONS on choosing a Tau product for your automation system!
Tau S.r.l. produces components for automatic gates, doors, barriers and shutters. These include gear motors, control units, radio control devices, flashing lights, photocells and accessories.
Tau products are exclusively made with top quality materials and processes and, as a company, we constantly research and develop innovative solutions in order to make our equipment increasingly easier to use. We also pay great attention to all details (technology, appearance and ergonomics). The extensive Tau range makes it possible for your fitter to choose the product which best meets your requirements.
Tau, however, does not produce your automated system as this is the outcome of a process of analysis, evaluation, choice of materials and installation performed by your fitter.
Each automated system is unique, therefore, and only your fitter has the experience and professionalism required to create a system that is tailor-made to your requirements, featuring long-term safety and reliability, and, above all, professionally installed and compliant with current regulations.
An automated system is handy to have as well as being a valid security system. Just a few, simple operations are required to ensure it lasts for years.

DESCRIPTION

The **BIG** automated system for sliding gates is an electro-mechanical non-reversing operator that transmits motion to the leaf via a worm screw system.
The operator is available in 400V AC versions.
The non-reversing system ensures the leaf is mechanically locked when the motor is not operating. A convenient and safe release system with customised key makes it possible to manually move the leaf in the event of a malfunction or of a power failure.
Even if your automated system satisfies regulatory safety standards, this does not eliminate “residue risks”, that is, the possibility of dangerous situations being generated, usually due to irresponsible and/or incorrect use. For this reason we would like to give you some suggestions on how to avoid these risks:

- **Before using the system for the first time:** ask your fitter to explain how residue risks can arise and read the instructions and warnings in the user handbook that your fitter will have given you. Keep this manual for future use and, if you should ever sell your automated system, hand it over to the new owner.
- **Your automated system carries out your commands to the letter:** irresponsible and/or incorrect use may cause it to become dangerous. Do not use the system if people, animals and/or objects enter its operating area.
- **IT IS NOT A TOY!** Make sure children do not play near the system and keep the remote control device out of their reach.
- **Faults:** If you notice any abnormal behaviour, disconnect the system from the power supply immediately and perform the manual release operation (see figure). Do not attempt to repair the door but call in your fitter: the system will operate manually as it did before installation.
- **Maintenance:** to ensure long life and totally safe operation, the system required routine maintenance, just like any other piece of machinery. Establish maintenance times together with your fitter. Tau recommends a frequency of 6 months for normal domestic installations but this may vary depending on the intensity of use (always every 3000 work cycles).

N.B.: All controls, maintenance work and/or repairs may only be carried out by qualified personnel.

- Do not modify the plant or the relative programming and adjustment parameters: your fitter will see to that.

N.B. Final testing, routine maintenance and any repairs must be documented by the fitter (in the relative spaces) and such documents kept by the owner of the system (IF THE DOCUMENTS ARE NOT PRODUCED, THE WARRANTY WILL EXPIRE).

- **Disposal:** At the end of system life, make sure that it is demolished by qualified personnel and that the materials are recycled or disposed of according to local regulations.

The manual manoeuvre must ONLY be done with the door stopped and AFTER disconnecting power from the electrical control unit.

N.B.: if your remote control unit (if supplied) starts working badly after a time, or does not work at all, the batteries may be flat (they can last from several months to 2/3 years depending on what type is used). This can be seen from the fact that the transmission confirmation LED gets dimmer or only turns on for brief moments. Before contacting your fitter, try exchanging the battery with one from a good transmitter: if this is the reason for the fault, simply replace the battery with another one of the same type.

If you wish to add a new automated system to your house, contact your fitter and we at Tau to have the advice of a specialist, the most developed products on the market, best operation and maximum automation compatibility.
Thank you for reading these suggestions and we trust you are fully satisfied with your new system: please contact your fitter for any further requirements.

Serie BIG

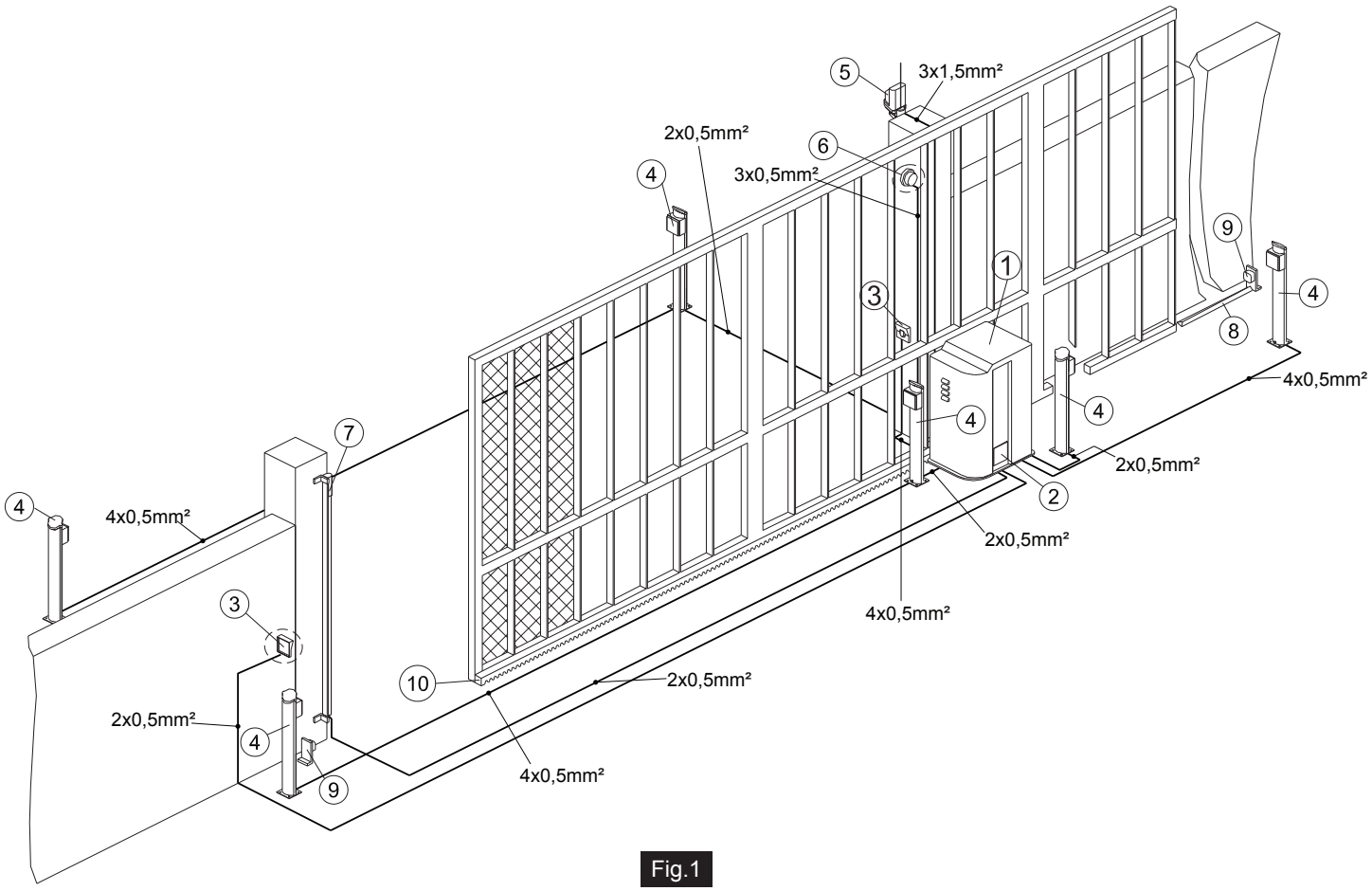


Fig.1

Fig.2

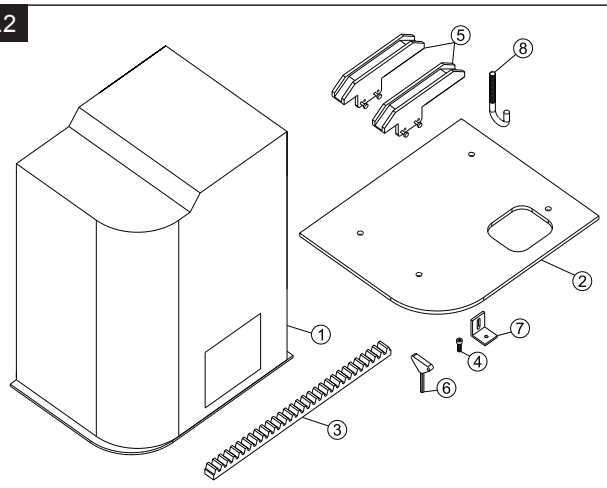


Fig.3 BIG18

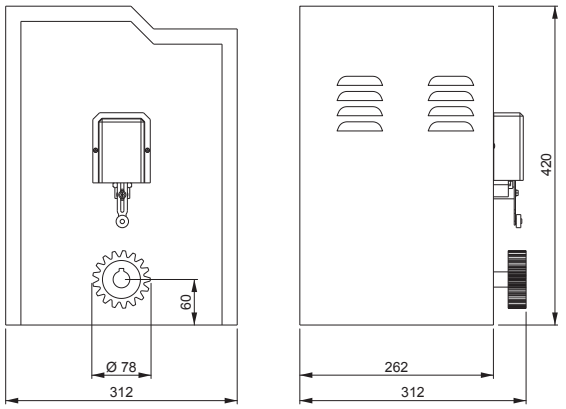


Fig.4 BIG30

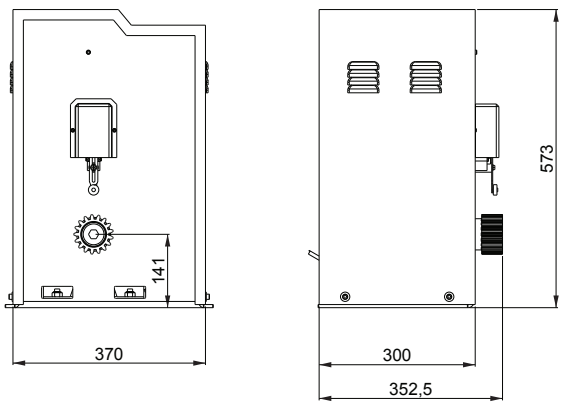


Fig.5 BIG40

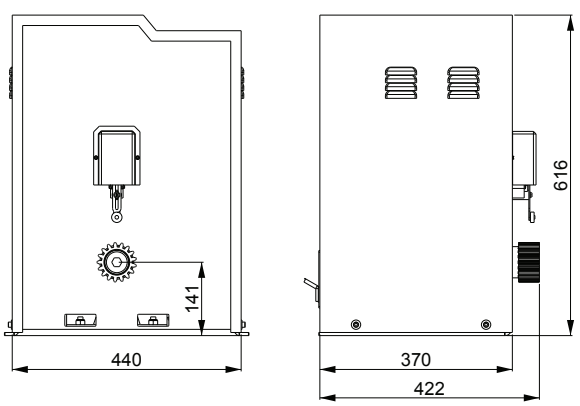


Fig.6

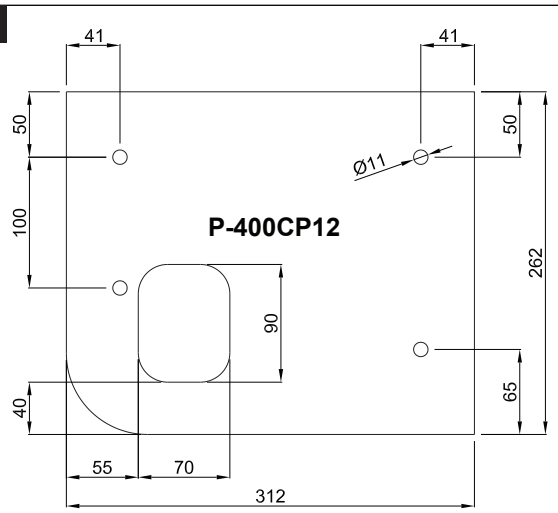
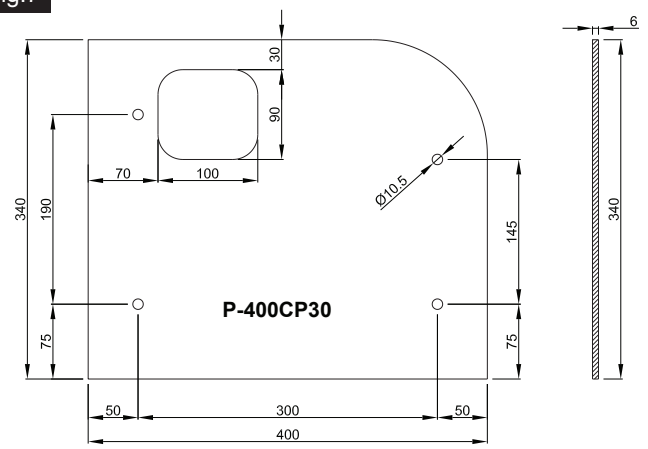


Fig.7



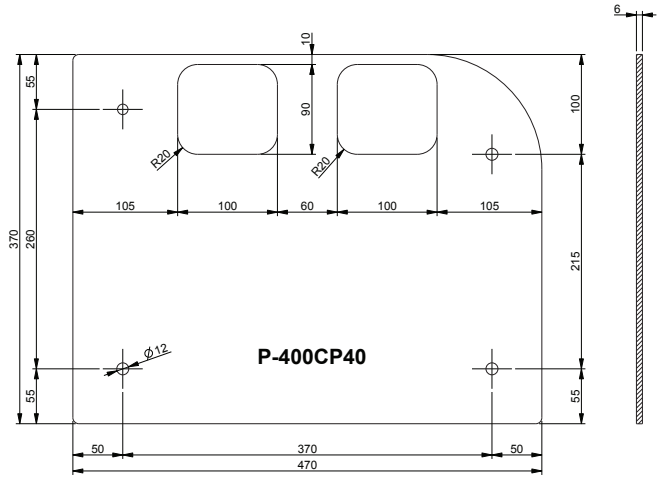


Fig.8

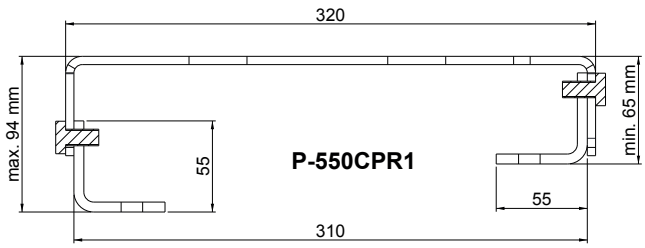


Fig.9

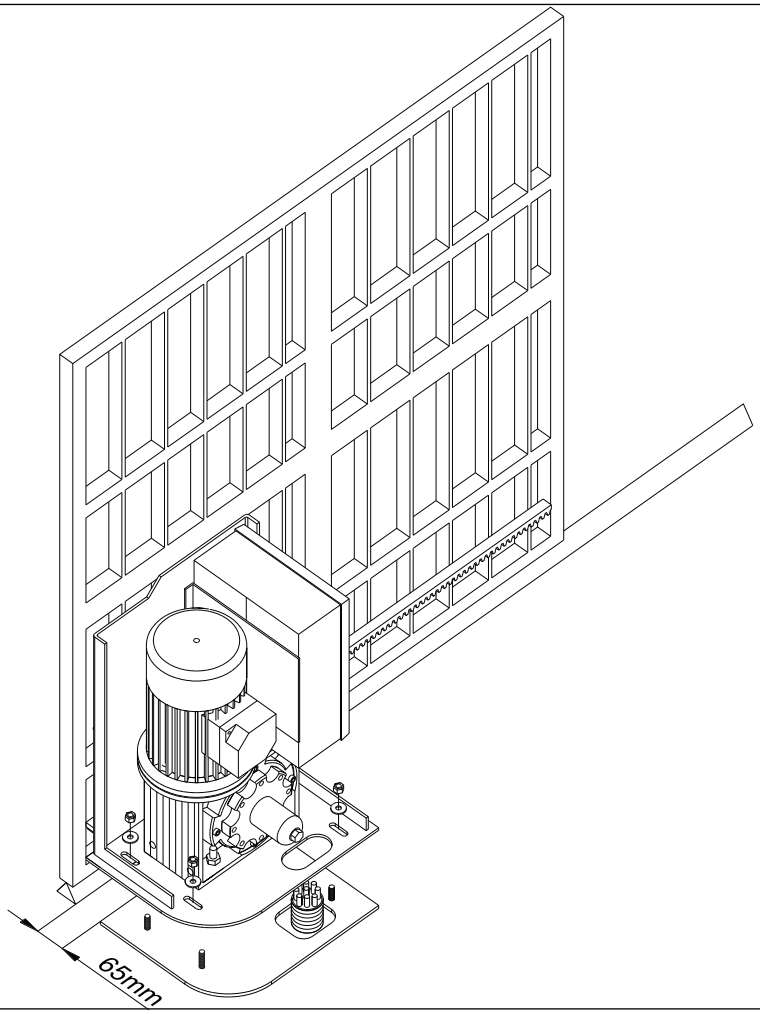


Fig.10

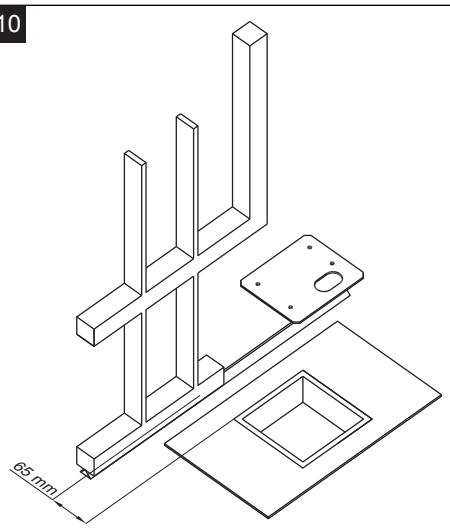


Fig.11

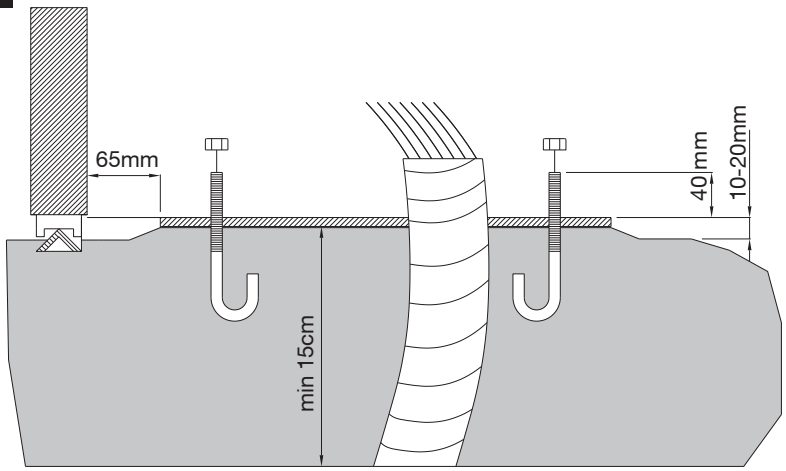


Fig.12

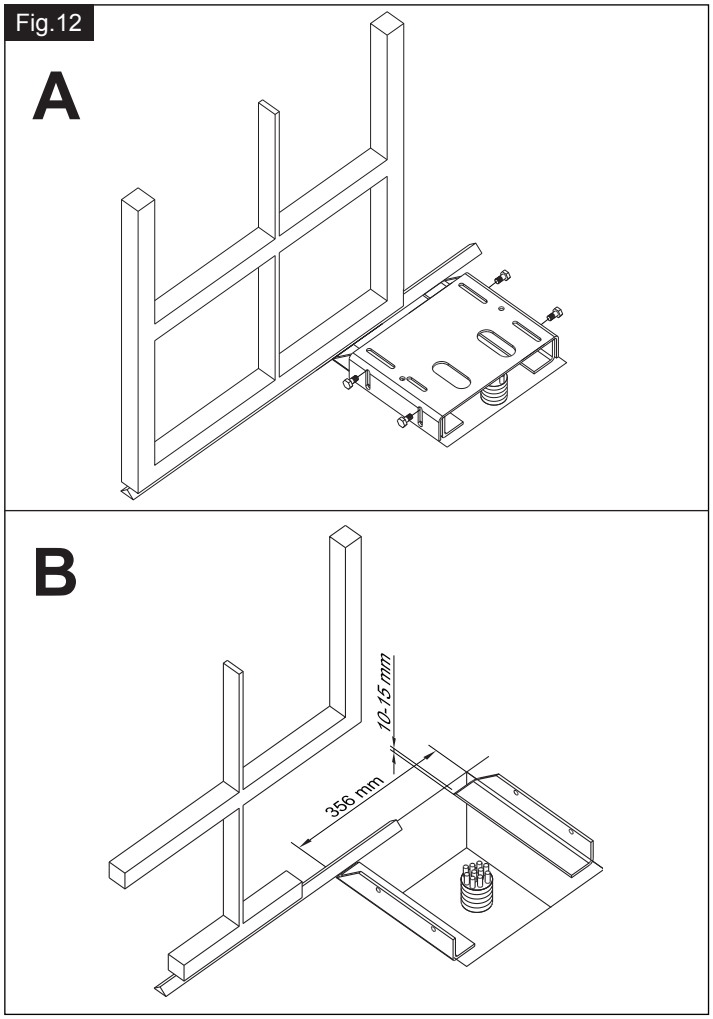


Fig.13

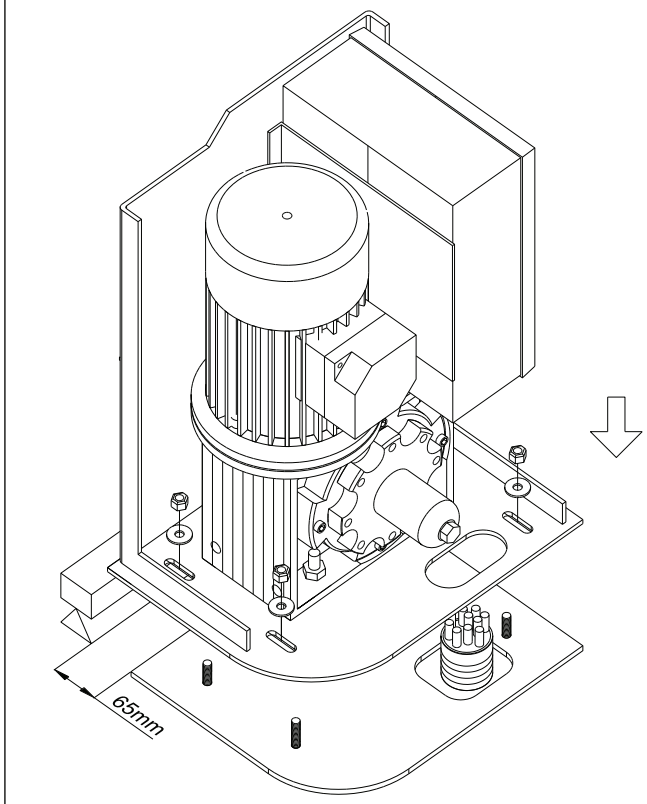


Fig.14

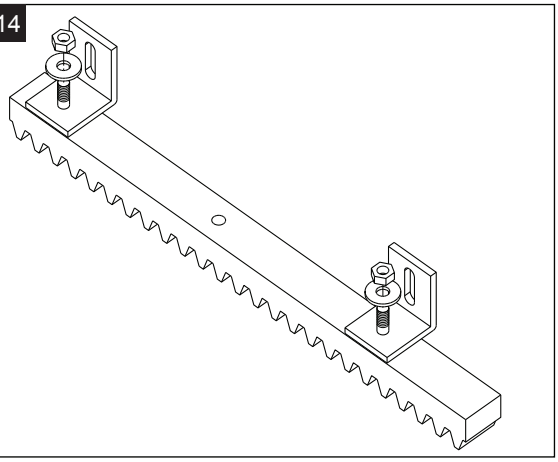


Fig.15

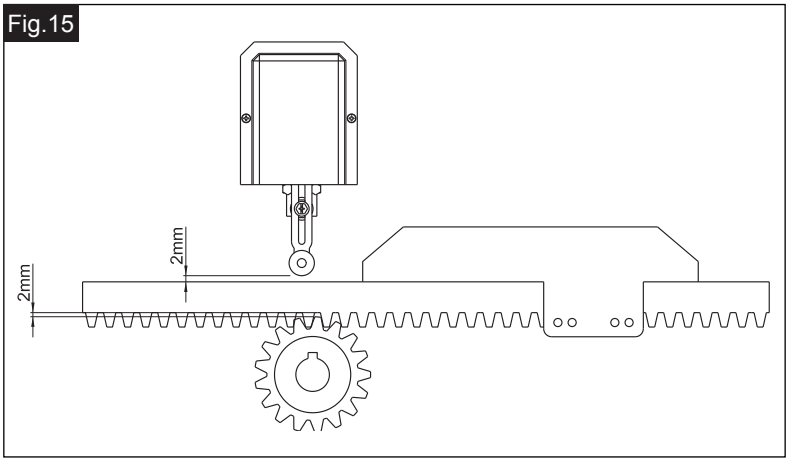


Fig.16

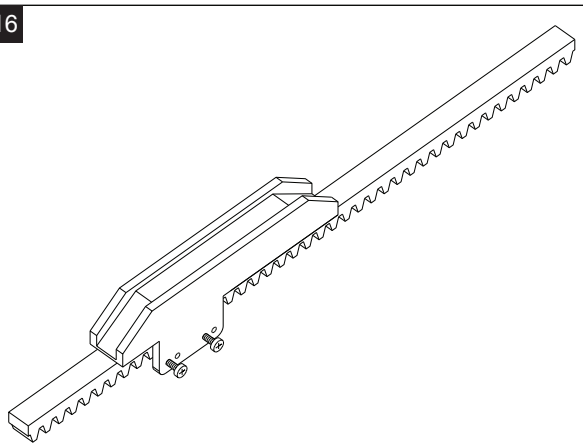


Fig.17

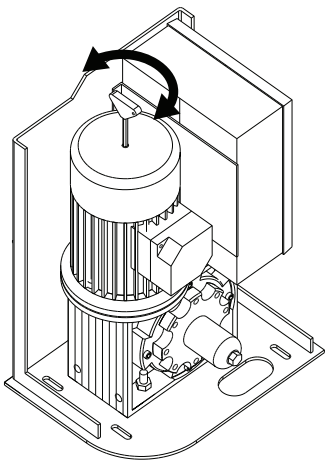
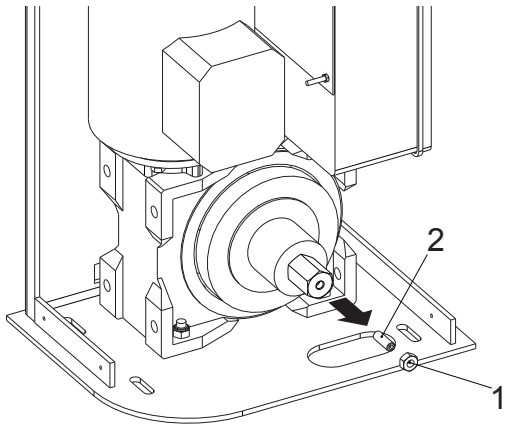
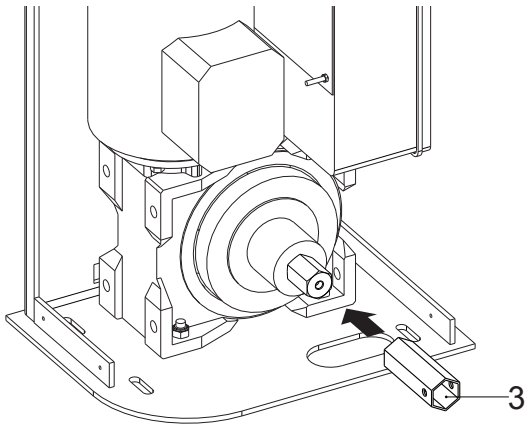


Fig.18



A



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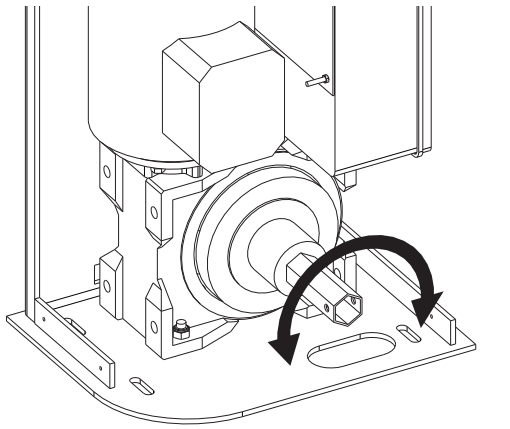

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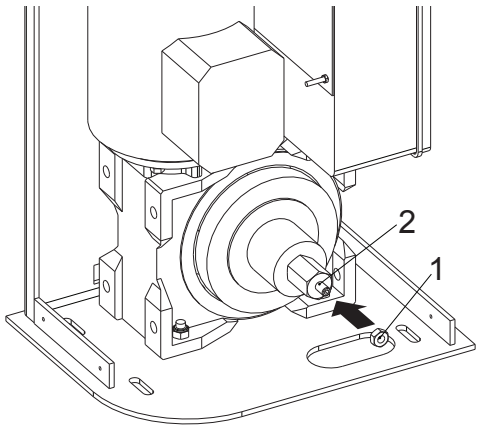


D

Fig.19

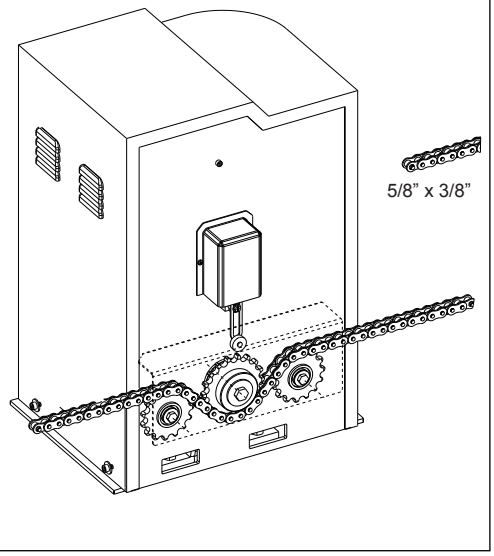


Fig.20

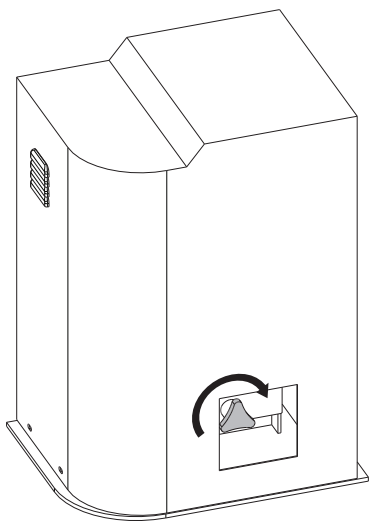
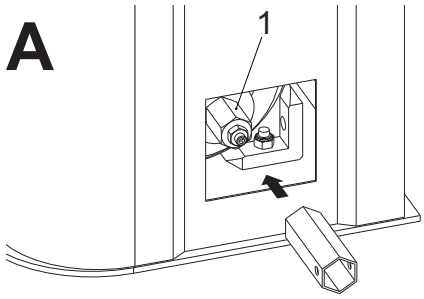


Fig.21

A



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