>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

MASTER

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

IT - Istruzioni originali

D_MNL0MASTER 21-05-2015 - Rev.29

MADE IN ITALY

Via Enrico Fermi, 43 - 36066 Sandrigo (VI) Italia
Tel +39 0444 750190 - Fax +39 0444 750376 - info@tauitalia.com - www.tauitalia.com

DESCRIZIONE, MODELLI E CARATTERISTICHE
DESCRIPTION, MODELS AND CHARACTERISTICS
BASCHREIBUNG, MODELLE UND MERKMALE
DESCRIPTION, MODÈLES ET CARACTÉRISTIQUES
DESCRIPCIÓN, MODELOS Y CARACTERÍSTICAS

I - Imotoriduttori della serie **MASTER** sono stati progettati per automatizzare qualsiasi tipo di cancello scorrevole ad uso residenziale, condominiale o industriale, con ante fino a 2000 Kg. **Non offre un elevato grado di sicurezza contro i tentativi di intrusione e/o effrazione. SI FA ESPRESSO DIVETO DI UTILIZZARE L'APPARECCHIO PER SCOPI DIVERSI O IN CIRCOSTANZE DIVERSE DA QUELLE MENZIONATE.**

GB - The **MASTER** series of gearmotors has been designed to automate any kind of sliding gate for residential, condominium or industrial use, with leafs weights of up to 2000 kg. **It is not intended as a high degree security deterrent against intrusion attempts and/or tampering. IT IS ALSO EXPRESSED THAT THE APPARATUS MUST NOT BE USED UNDER ANY CIRCUMSTANCE OR FOR ANY PURPOSE OTHER THAN THOSE STATED.**

D - Die Getriebemotoren der Serie **MASTER** wurden für die Automatisierung von jedem Schiebetortyp mit Torflügelgewicht bis 2000 kg geeignet für den Privaten so wie für den Industriellen bereich. **Sie bietet keinen Hochsicherheitsgrad gegen Eindringen- und/oder Einbruchversuchen an. ES IST AUSDRÜCKLICH VERBOTEN, DAS GERÄT ZU ANDEREN ZWECKEN ODER UNTER ANDEREN UMSTÄNDEN ALS ERWÄHNT ZU VERWENDEN.**

F - Les motoréducteurs de la série **MASTER** ont été projetés pour automatiser n'importe quel type de portail coulissant à usage résidentiel, collectif ou industriel, pesant jusqu'à 2000 Kg. **Il n'assure pas un niveau élevé de sécurité contre les tentatives d'intrusion et/ou d'effraction. IL EST FORMELLEMENT INTERDIT D'UTILISER L'APPAREIL DANS DES BUTS DIFFÉRENTS OU DANS DES CIRCONSTANCES DIFFÉRENTES DE CELLES QUI SONT MENTIONNÉES.**

E - Los motorreductores de la serie **MASTER** han sido diseñados para automatizar cualquier tipo de cancela decorredera para uso residencial, comunitario o industrial, con hojas de hasta 2000 Kg. **No ofrece un alto grado de seguridad contra los intentos de intrusión y/o robo. QUEDA TERMINANTEMENTE PROHIBIDO UTILIZAR EL EQUIPO PARA FINALIDADES DISTINTAS O EN CIRCUNSTANCIAS DISTINTAS DE LAS QUE SE INDICAN.**

MASTER12Q	Motoriduttore per cancelli fino a 1200 Kg, motore 18V, quadro elettrico incorporato.	Gearmotor for gates up to 1200 Kg, 18V motor, built-in control unit.	Getriebemotor für Tore bis 1200 Kg, 18V Motor, mit eingebauter Steuerzentrale.	Motoréducteur pour portails jusqu'à 1200 Kg, moteur 18V, centrale incorporée.	Motorreductor para verjas de hasta 1200 Kg, motor de 18V, central incorporada.
MASTER18QR	Motoriduttore per cancelli fino a 1800 Kg, motore 18V, quadro elettrico incorporato.	Gearmotor for gates up to 1800 Kg, 18V motor, built-in control unit.	Getriebemotor für Tore bis 1800 Kg, 18V Motor, mit eingebauter Steuerzentrale.	Motoréducteur pour portails jusqu'à 1800 Kg, moteur 18V, centrale incorporée.	Motorreductor para verjas de hasta 1800 Kg, motor de 18V, central incorporada.
MASTER-R	Motoriduttore per cancelli fino a 1000 Kg, motore 18V, quadro elettrico incorporato.	Gearmotor for gates up to 1000 Kg, 18V motor, built-in control unit.	Getriebemotor für Tore bis 1000 Kg, 18V Motor, mit eingebauter Steuerzentrale.	Motoréducteur pour portails jusqu'à 1000 Kg, moteur 18V, centrale incorporée.	Motorreductor para verjas de hasta 1000 Kg, motor de 18V, central incorporada.
MASTER20QR	Motoriduttore per cancelli fino a 2000 kg, motore 230V con quadro elettrico incorporato.	Gearmotor for gates up to 2000 Kg, 230V motor, built-in control unit.	Getriebemotor für Tore bis 2000 Kg, 230V Motor, mit eingebauter Steuerzentrale.	Motoréducteur pour portails jusqu'à 2000 Kg, moteur 230V, centrale incorporée.	Motorreductor para verjas de hasta 2000 Kg, motor de 230V, centrale incorporada.
MASTER20QM	Motoriduttore per cancelli fino a 2000 kg, motore 230V con quadro elettrico incorporato e fine corsa magnetici	Gearmotor for gates up to 2000 Kg, 230V motor, built-in control unit and magnetic limit switches.	Getriebemotor für Tore bis 2000 Kg, 230V Motor, mit eingebauter Steuerzentrale und Magnetische Endschalter.	Motoréducteur pour portails jusqu'à 2000 Kg, moteur 230V, centrale incorporée et fin de course magnétiques.	Motorreductor para verjas de hasta 2000 Kg, motor de 230V, centrale incorporada y final de recorridos magnéticos.
MASTER20T	Motoriduttore per cancelli fino a 2000 kg, motore 400V trifase, senza quadro elettrico.	Gearmotor for gates up to 2000 Kg, 400V three-phase motor, without a control unit.	Getriebemotor für Tore bis 2000 Kg, 400V dreiphasig Motor, mit eingebauter Steuerzentrale.	Motoréducteur pour portails jusqu'à 2000 Kg, moteur 400V triphasé, sans centrale.	Motorreductor para verjas de hasta 2000 Kg, motor de 400V trifásico, sin centrale de mando.

DATI TECNICI - TECHNICAL DATA - DONNÉES TECHNIQUES - TECHNISCHE DATEN - DATOS TÉCNICOS

	MASTER12Q	MASTER18QR	MASTER-R	MASTER20QR	MASTER20QM	MASTER20T
Frequenza - Frequency - Frequenz - Fréquence - Frecuencia	50 - 60 Hz					
Alimentazione - Power - Stromversorgung - Alimentation - Alimentación	230V AC					400V AC
Motore - Motor - Motor - Moteur - Motor	18V DC		18V DC (powered 24V DC)	230V AC		400V AC Three-phase
Condensatore - Condenser - Kondensator - Condensateur - Condensador	-			16 µf		-
Corrente assorbita - Absorbed current - Stromaufnahme - Courant absorbé - Corriente absorbida	2,6 A	2,9 A	2,8 A	3,4 A		3,7 A
Potenza assorbita - Absorbed power - Leistungsaufnahme - Puissance absorbée - Potencia absorbida	300 W	360 W	360 W	550 W		1000 W
Spinta max. - Max. thrust - Max. Schub - Poussée max. - Empuje máx.	1350 N	1500 N	1300 N	1890 N		
Velocità anta - Leaf speed - Flügelgeschwindigkeit - Vitesse du vantail - Velocidad hoja	11 m/min	14 m/min	23 m/min (opening) 14 m/min (closing)	10,5 m/min		10,5 m/min
Grado di protezione - Protection level - Schutzart - Degré de protection - Grado de protección	IP 54					
Ciclo di lavoro - Work cycle - Arbeitszyklus - Cycle de travail - Ciclo de trabajo	100 %			40 %		58 %
Temperatura di esercizio - Operating temperature - Betriebstemperatur - Temperature de fonctionnement - Temperatura de trabajo	-20°C ÷ +55°C					
Rapporto di riduzione - Reduction ratio - Untersetzungsverhältnis - Rapport de réduction - Relación de reducción	1/30					
Intervento termoprotezione - Thermal protection trips at - Eingreifen des Wärmeschutzes - Intervention protection thermique - Activatión termoprotección	-			160°C		150°C
Peso max. cancello - Max. gate weight - Torgewicht max. - Poids max portail - Peso máximo de la cancela	1200 Kg	1800 Kg	1000 Kg	2000 Kg		
Modulo pignone - Pinion module - Ritzel modul - Module pignon - Mòdulo piñón	4 mm					

Quando il sistema in 12V DC è alimentato unicamente dalla batteria (in caso di black-out oppure in abbinamento con pannello fotovoltaico), le prestazioni espresse dal motoriduttore (forza e velocità) si riducono del 30% ca.

When the system is in the 12V DC mode and is powered by the battery only (in the event of a power failure or when used in conjunction with a photovoltaic panel), the gear motor's output (power and speed) is reduced by approximately 30%.

Anmerkung: wenn das 12V DC System nur über Batterie gespeist ist (bei stromausfall oder in kombination mit einem Photovoltaicpaneel), verringern sich die leistungen des Getriebemotors (Kraft und Geschwindigkeit) um ca. 30%.

Attention : quand le système à 12V DC est alimenté uniquement par la batterie (en cas de coupure de courant ou bien en association avec un panneau photovoltaïque), les performances du motoréducteur (force et vitesse) diminuent d'environ 30% .

Nota: cuando el sistema de 12V DC es alimentado únicamente por la batería (en caso de corte de corriente, o bien combinado con panel fotovoltaico), las prestaciones del motorreductor (fuerza y velocidad) se reducen en un 30%.

OVERALL DIMENSIONS
The main overall dimensions of the sliding gate are indicated in fig. 1, 2 and 3; the base plate dimensions are indicated in fig. 8, while the dimensions of the adjustable base plate are indicated in fig. 28.

PRELIMINARY OPERATIONS
Before starting any type of operation, carefully read the instruction present in this manual.
Before starting installation, make sure that all parts are present (fig. 4), wear suitable work clothing and accessories and do not handle live electrical parts.

INSTALLATION MEASUREMENTS
The measurements indicated in fig. 6 and 7 for the excavation and those in fig. 11 for the positioning of the base plate, must be respected for the correct installation of the gearmotor.

PRE-INSTALLATION CHECKS
Use on gates with a gradient or slope is NOT allowed.

Before installation, check that:
- the wheels of the gate have been fitted so that the gate itself is stable, and that they are in good condition and working correctly;
- the track is free, straight and clean along its entire length and has the stops at each end;
- the upper guide is inline with the track, and is greased and allows the leaf a play of approx. 1 mm;
- check that the floor stops are present.

LOCATION
If fixing directly to a concrete surface, choose a position equivalent of the area outlined in fig. 6, or as in fig. 7 if an excavation has to be made.

BASE PREPARATION
Dig a sufficiently wide foundation that is at least 15 cm deep. Introduce a protective sheathing for the cables.

FIXING OF THE BASE PLATE
Note: the foundation counterplate is positioned correctly when the arrows on it are pointing in the following directions: one towards the gate and the other to the left (1 fig. 12).
Once the foundations are ready, prepare the base plate by inserting the threaded ties into their holes, securing them on the lower face with the 4 narrow nuts and with the 4 locking nuts on the upper face (fig. 9). **Note: the threaded section must be protruding by no more than 40 mm in order to secure the gearmotor** (fig. 10). Cover with concrete, making sure that the ties are well imbedded; the base plate must be perfectly level and 1 or 2 cm (fig. 11) from floor level and approx. 50 mm from the gate (fig. 7).
Note: The gearmotor can also be fitted without the base plate, using 4 foundation bolts on a level concrete surface making sure that the measurements indicated in fig. 6 are respected.
Optionally, a height adjustable base plate can be used. In this case the fixed ties must be welded to the track and after locked with 4 expansion bold M12x120 (see fig. 29). The adjustable base plate is then secured as indicated in fig. 30.
In this way the gearmotor can be adapted to an already existing system; the measurements indicated in fig. 29 must be respected.

SECURING OF THE GEARMOTOR
Remove the 4 locking nuts from the threaded section of the ties, position the gearmotor as illustrated in fig. 13, then secure it using the washers and previously mentioned nuts (fig. 14). Pass the cables through the hole of the base plate.
Note: a hole has been arranged on the alumium base (fig. 13), under the transformer housing, to drain possible water deposit.
The same operations are also use for the adjustable base plate as indicated in fig. 31 and 32.

SECURING OF THE RACK
Having previously drilled the leaf, secure the rack with the 6.3 mm diameter self-tapping screws, see fig. 16.
It is extremely important that the installation measurements and the distance between the teeth of the gear and the teeth of the rack are respected, as indicated in fig. 18, 19 and 20.
Note: the rack should run on the gearmotor gear for the entire width of its teeth (fig. 24).
There are two available types of rack: the standard enbloc type and the sectional type of which each single piece measures 50 cm in length fig. 27.

SECURING AND ADJUSTMENT OF THE LIMIT SWITCH PADS
Position each pad close to the end of the rack as in fig. 17. Manually manoeuvring the leaf, position the pads so that they make slight contact with the microswitch lever just before the intervention of the mechanical stops at the end of the track, and tighten the screws.
The manufacturer advises that a distance between a minimum of 15 mm and a maximum of 18 mm should be maintained between the gearmotor casing and the limit switch pads fitted on the rack in order for the automation system to function correctly (fig. 23).
The contact point of the limit switch pads with the spring should also be lubricated with a little oil in order to help sliding and prevent the spring from being compressed.
Note: for complete safety, the mechanical stops with rubber cap (floor stops) must be fitted, as shown in fig 5.

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.

MAGNETIC LIMIT SWITCHES (MASTER20QM)
During movement, the gate mounting the magnets fitted on the rack approaches the sensor installed on the gearmotor, and activates this sensor, consequently stopping closure.
The magnets must be installed at a distance from the closing edge (X, fig. 17B) taking gate inertia into account. We recommend testing the magnets on the rack before fixing them permanently (the magnets remain firmly in place) in order to find the correct position for optimal operation.
The magnet with North polarity (black) is used as an opening limit switch (OLS), and the magnet with South polarity (red) is used as a closing limit switch (CLS).

Note: to activate correctly the magnetic sensor, distances as shown in picture 17/B must be respected
IMPORTANT: It is necessary to activate the brake function (see controller's manual, "DIP Switches" section) when magnetic limit switches are installed.

TYPE OF SYSTEM (fig. 5)
1 Gearmotor
2 Photocell column
3 Flashing light with antenna
4 key operated selector switch
5 Safety photocell
6 Sensitive edge
7 Floor stop
8 Post for control panel
9 Control panel complete with casing

Cable sections:

	MASTER12Q MASTER18QR MASTER-R	MASTER20QR(M)	MASTER20T
a	3 x 1,5 mm²	3 x 1,5 mm²	4 x 1,5 mm²
b	4 x 0,5 mm²	4 x 0,5 mm²	4 x 0,5 mm²
c	2 x 0,5 mm²	2 x 0,5 mm²	2 x 0,5 mm²
d	4 x 0,5 mm²	4 x 0,5 mm²	4 x 0,5 mm²
e	2 x 0,5 mm²	2 x 0,5 mm²	2 x 0,5 mm²
f	3 x 0,5 mm²	3 x 0,5 mm²	3 x 0,5 mm²
g	2 x 0,5 mm²	2 x 0,5 mm²	2 x 0,5 mm²
h	RG58	RG58	RG58
i	2 x 0,5mm²	2 x 0,5mm²	2 x 0,5mm²
l	(Gearmotor)		4 x 1,5mm²
m	(Limit switches)		3 x 0,5mm²

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.

ADJUSTMENT OF THE ELECTRONIC/ELECTRIC CLUTCH

WARNING: Check that the impact force value measured at the points foreseen by the EN 12445 standard is lower than that indicated in the EN 12453 standard.

The adjustment on **MASTER12Q** is already preset during the programming of the control unit and can in any case be set (see instructions K123M).

The adjustment of **MASTER18QR** and **MASTER-R** can be performed through the control unit, see instructions K126MA.

The adjustment of **MASTER20QR** and **MASTER20QM** can be performed through the control unit, see instructions D705M.

The adjustment of **MASTER20T** can be performed through the control unit, see instructions D703M.

ELECTRICAL CONNECTIONS

Note: the MASTER series has a microswitch that cuts-out the motor when the casing is opened, A fig. 25 (the control unit remains live).

Make sure that the gearmotor is disconnected from the power supply before performing any operations.

To make the connections, remove the gearmotor casing, pass the cables through the holes on the base plate (when used) and through the lower section of the gearmotor. Then arrange the cables for the connection to the control unit terminal block that is located in the electrical components support.

The distance between the control unit and the motor must not exceed 10 – 12 m.

Use cables with a minimum section of 2.5 mm^2 for the power circuit of the MASTER12Q-18QR-R and 1.5 mm² for the MASTER20QR-M and MASTER20T, and 0.5 mm^2 for the control circuit.

Consult the related instructions booklet for the control unit connections:

- K123M MASTER12Q;
- K126MA MASTER18QR and MASTER-R;
- D705M MASTER20QR and MASTER20QM.
- D703M MASTER20T;

Note: the thermal protection (for MASTER20T only) must be wired in series to the common of the limit switch (terminal 19 of the D703M board).

12V BATTERY INSTALLATION

If one wishes to fit a battery to the **MASTER12Q-18QR-R** gearmotor in order to guarantee power in the event of blackout, remove the casing and fit the battery into its location; then connect the power supply cables to the tongues.

Note: when using in battery the performance of the MASTER-R (24v DC) is the same as the MASTER12Q, with the same speed both opening and closing.

MANUAL RELEASE

In the absence of the mains power supply, remove the lock cover, insert the special key and turn it as indicated in fig. 21.

Then pull the lever outwards in order to manually manage the gate, as shown in fig. 22.

DC versions feature a safety micro-switch in the release lever ("A", pic. 22). In case the gate operator stays released for more than 5 seconds, the operator will perform a cycle at a slow speed to reset the operating parameters to the values originally saved (see "Restoring automatic operation").

LIMIT SWITCH

The MASTER series has been designed to operate with a microswitch electromechanical limit switch device.

The cables are connected as indicated in fig. 25:

1= grey (common);
2= grey (common);
3= orange (L.S. close - contact N.C.);
4= red (L.S. open - contact N.C.);
5= grey (common).

If the movement continues when the gears rotate in a clock-wise direction and the spring moves as shown in fig. 26, invert the red and orange wires on the control unit terminal block.

In order to connect the magnetic limit switches to other control units, wiring must be as follows:

- black (L.S. open - contact N.C.);
- brown (L.S. close - contact N.C.);
- blue (Common).

GENERAL WARNINGS

Integrate the gate safety in accordance with the present regulations.

- Choose short paths for the cables and keep the power and control cables separated;
- Make sure that the equipment is correctly grounded;
- Abide by the present regulations for the setup of the gearmotor's maximum torque;
- An external switch should be fitted in compliance with the European safety standards in order to turn off the power supply to the gate for maintenance purposes;
- Make sure that all devices are efficient and in working order;
- Post clearly legible signs informing that the gate is motorised.

USE

The MASTER series gearmotors have been designed for the movement of horizontally sliding gates weighing up to 1000 Kg for **MASTER-R**, 1200 Kg for **MASTER12Q**, 1800 Kg for **MASTER18QR**, and 2000 Kg for **MASTER20QR**, **MASTER20QM** and **MASTER20T**.

Use of the equipment for aims or circumstances different from those stipulated is prohibited.

The following functions can be selected by means of the control unit:

automatic: the gate is opened and closed following a command input;

semiautomatic: the gate is opened or closed following a command input;

The gate can be manually controlled by means of a **manual release** in the event of a power failure. In the event of a power failure, normal functioning of the **MASTER12Q**, **MASTER18QR** and **MASTER-R** model is guaranteed by means of a buffer battery.

It must be remembered that this has an automatic device and supplied with power, therefore the necessary precautions must be implemented while in use. Therefore it is advised:

- not to touch the equipment with wet hands and/or wet or bare feet;
- to disconnect the power before opening the control box and/or gearmotor;
- not to pull the power supply cable to remove the plug from the socket;
- not to touch the motor unless you are sure that it has cooled;
- to start the manoeuvre of the gate only when it is fully visible;
- to stay outside the manoeuvring range of the gate when in movement: wait until it has stopped moving;
- not to let children or animals play close to the gate;
- not to let children, or those unable, use the remote control or other activating devices;
- to perform periodic maintenance;
- to disconnect the power supply and manually open and close the gate only when possible and safe in the event of malfunction. Call an authorised technician and do not try to resolve the problem yourself.

NOTE: THE USE OF A WATER-JET CLEANER OR SIMILAR IS PROHIBITED FOR THE CLEANING OF THE AUTOMATION SYSTEM. JETS OF WATER MUST NOT BE DIRECTED ONTO THE AUTOMATION SYSTEM.

MAINTENANCE

The MASTER series gearmotors require very little maintenance. Nevertheless, their correct functioning also depends on the state of the gate. Therefore here is a short description of the operations to perform in order that the gate remains in good working order.

Warning: no persons, except the specialised maintenance technician, must activate the automatic gate during the maintenance operations.
Therefore the power supply should ideally be disconnected thereby avoiding possible electric shocks. If on the other hand it is necessary that the power supply is connected for the said inspection, each control device (remote controls, push button panels, etc) should be checked and disabled except for those being used by the maintenance technician.

Routine maintenance
Each of the following operations must be performed when necessary or in any case every 6 months for domestic use (approx. 3000 working cycles) and every 2 months for intensive use, e.g. apartment blocks (again, every 3000 working cycles).

Gate
- Lubricate (with oiler) the wheels of the gate;
- Check that the rack is clean and correctly connected;

Automation system
- Check that the safety devices are working correctly (photocells, pneumatic edges, torque limiting device, etc..);

Extraordinary maintenance
If more complicated tasks need to be performed on the mechanisms, the gearmotor should ideally be removed in order for the work to be carried out by experienced technicians in the manufacturers or an authorised workshop.

SOUND LEVEL

The aerial noise produced by the gearmotor under normal use is constant and does not exceed 70 dB.

SCRAPPING

The materials must be disposed of in accordance with the current laws and regulations.
No dangers or risks are present in the event of scrapping of the automation system.
If materials are to be recycled, they should ideally be divided based on their type (electrical parts – copper – aluminium – plastic – etc…).

DISMANTLING

In the event that the automation system needs to be dismantled and reassembled in another location, it is necessary to:
- turn off the power supply and disconnect the entire electrical system;
- remove the gearmotor from the supporting base;
- replace all components that cannot be removed or that are damaged.

FAULTS: TROUBLESHOOTING

The gate does not open, the motor does not turn.
- Make sure that the photocells or sensitive edges are clean, uninhibited and aligned. Proceed accordingly.
- Make sure that the electronic equipment is correctly powered and check that the fuses are intact.
- Check that the functions are correct by means of the control unit LEDs (see related instructions). Identify the possible fault. If the LEDs show that a start command is active, check that there are no remote controls, start buttons or other devices keeping the start contact activated (closed).
- If the control unit is not working, replace it.

If the fault is not related to one of the above mentioned conditions, replace the gearmotor.

The gate does not open, the motor turns but no movement occurs.
- The manual release is still on. Restore the motorised function.
- Check if the gate is in contact with the mechanical stops. Manually release the gate, move it and restore the motorised function. Check and correct the position of the limit switch pads.
- Check that the gate has no mechanical adjustment defects.

If the fault is not related to one of the above mentioned conditions, replace the gearmotor.

GUARANTEE: GENERAL CONDITIONS

TAU guarantees this product for a period of 24 months from the date of purchase (as proved by the sales document, receipt or invoice).
This guarantee covers the repair or replacement at TAU's expense (ex-works TAU: packing and transport at the customer's expense) of parts that TAU recognises as being faulty as regards workmanship or materials.
For visits to the customer's facilities, also during the guarantee period, a "Call-out fee" will be charged for travelling expenses and labour costs.

The guarantee does not cover the following cases:
- If the fault was caused by an installation that was not performed according to the instructions provided by the company inside the product pack.
- If original TAU spare parts were not used to install the product.
- If the damage was caused by an Act of God, tampering, overvoltage, incorrect power supply, improper repairs, incorrect installation, or other reasons that do not depend on TAU.
- If a specialised maintenance man does not carry out routine maintenance operations according to the instructions provided by the company inside the product pack.
- Wear of components.

The repair or replacement of pieces under guarantee does not extend the guarantee period.
In case of industrial, professional or similar use, this warranty is valid for 12 months.

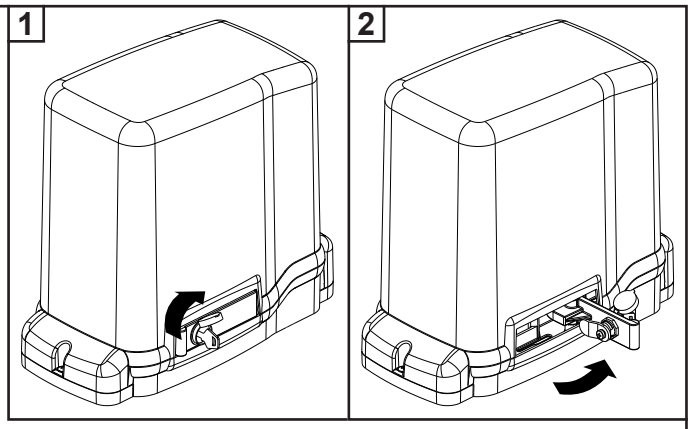
> ENGLISH

>MOVING LIFE

User Guide

MANUAL OPERATION
If the gate has to be operated manually due to a power cut or malfunction of the automated system, use the release device as follows:
1_ Remove the cover of the lock, fit the relative key and turn it as shown in fig. 1.
2_ Pull the release lever as shown in fig. 2.
3_ Open and close the gate manually.

RESTORING NORMAL OPERATION
To prevent an involuntary pulse from activating the gate during the manoeuvre, cut power to the system before relocking the operator.
1_ Re-close the release lever.
2_ Turn the key anti-clockwise.
3_ Remove the key and close the cover of the lock.
4_ Move the gate until the release meshes.



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 **MASTER** 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 12V DC, 230V AC and 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.

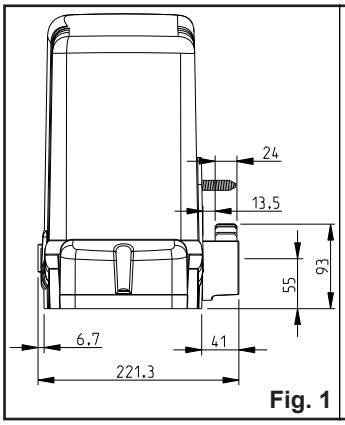


Fig. 1

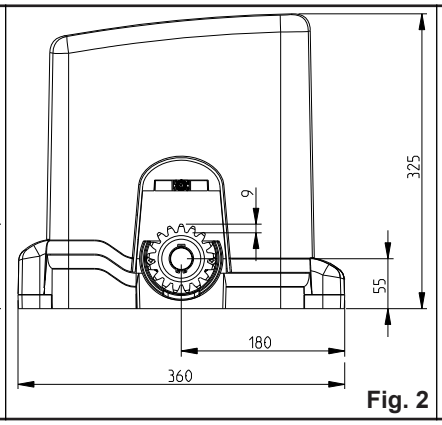


Fig. 2

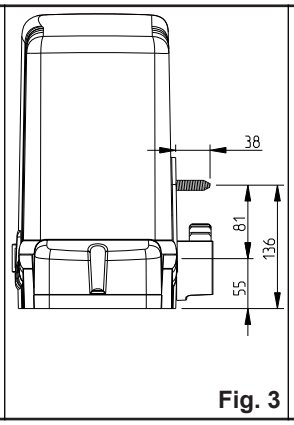


Fig. 3

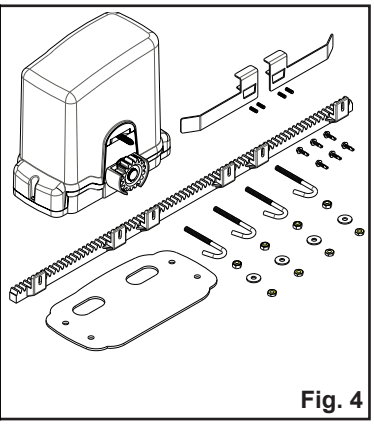
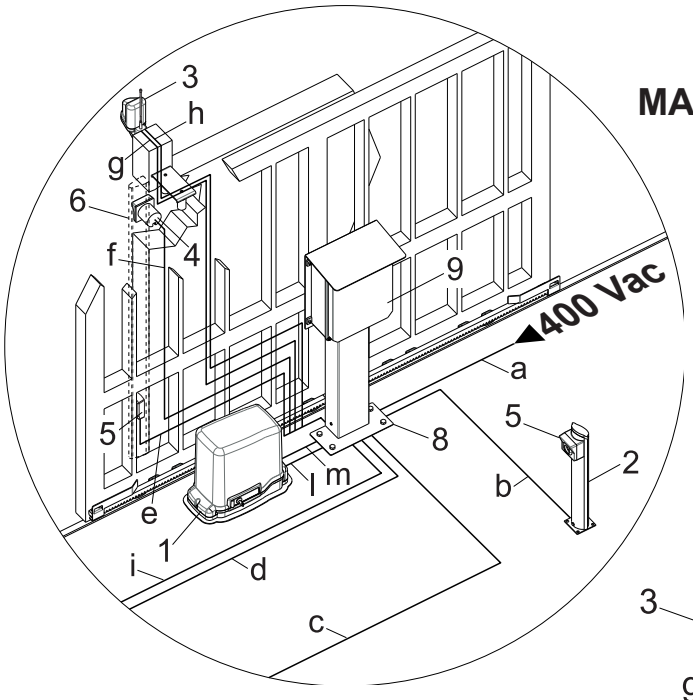
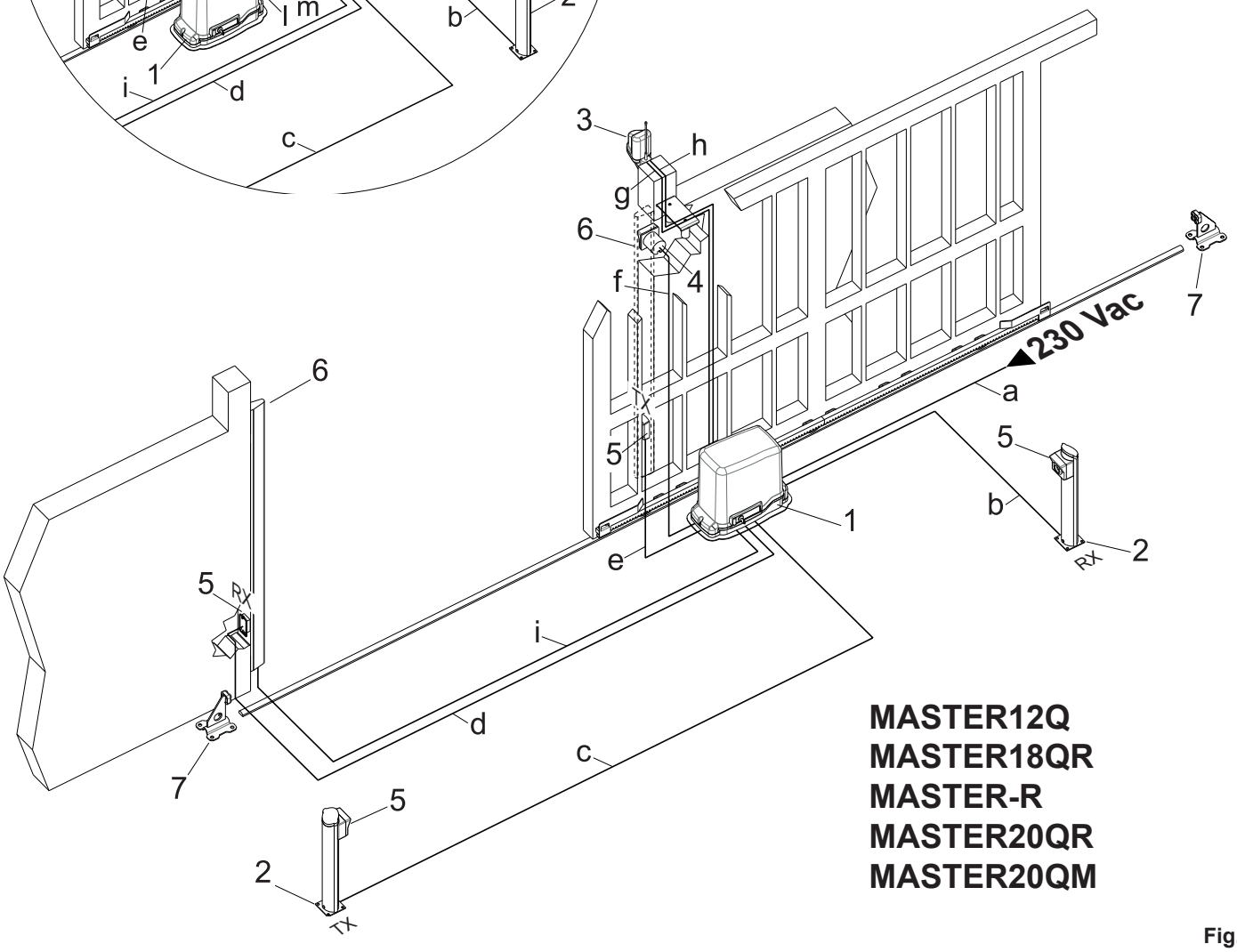


Fig. 4

MASTER20T





MASTER12Q
MASTER18QR
MASTER-R
MASTER20QR
MASTER20QM

Fig. 5

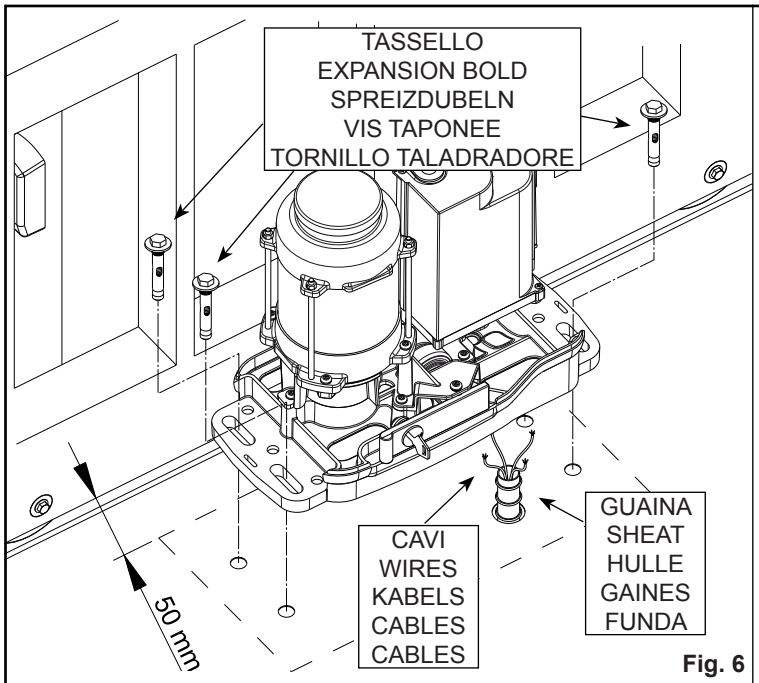


Fig. 6

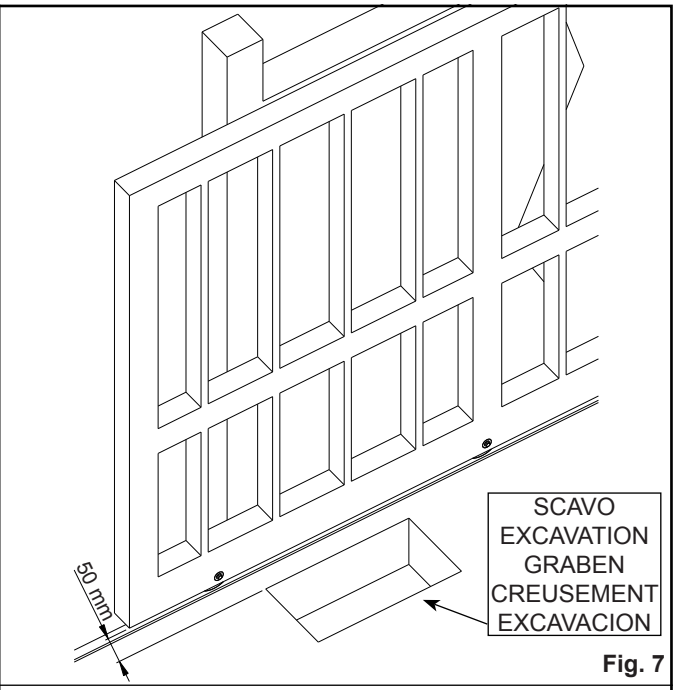


Fig. 7

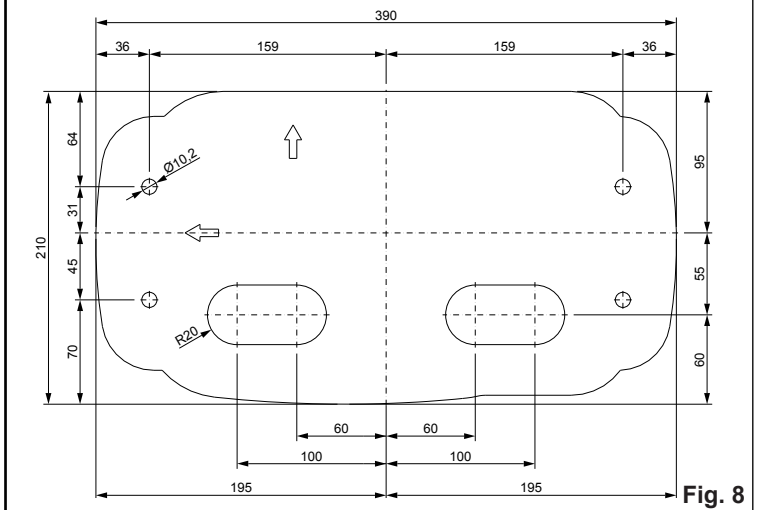


Fig. 8

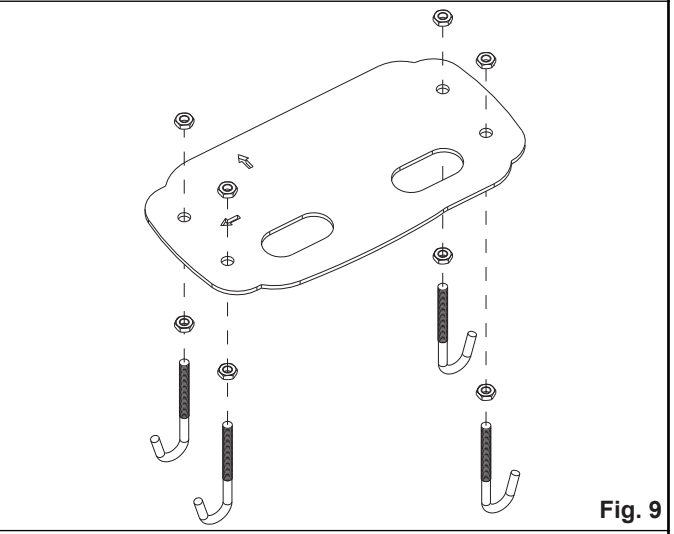


Fig. 9

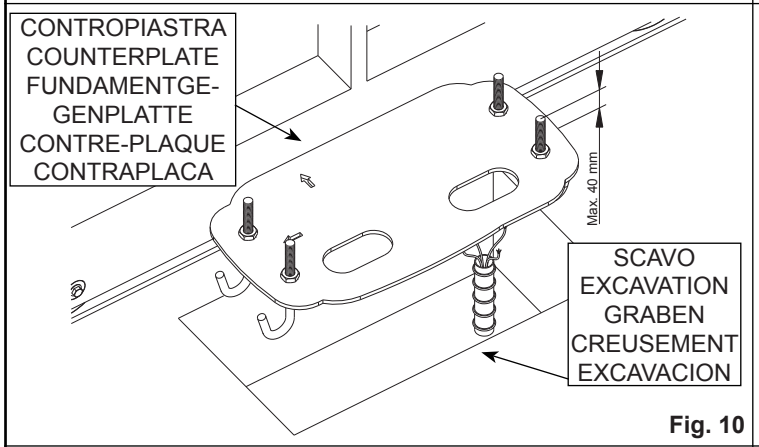


Fig. 10

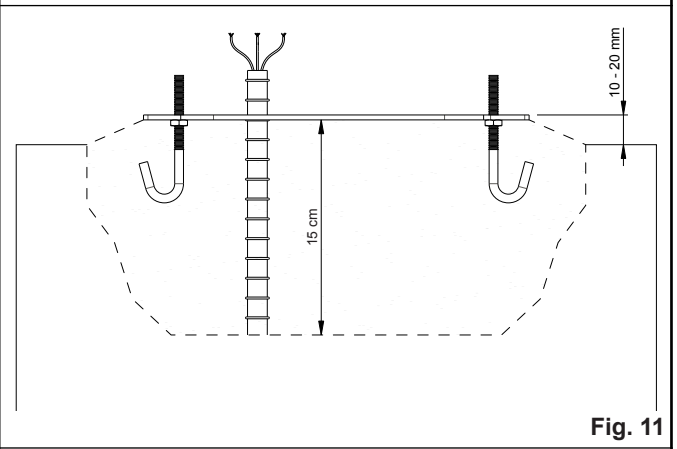


Fig. 11

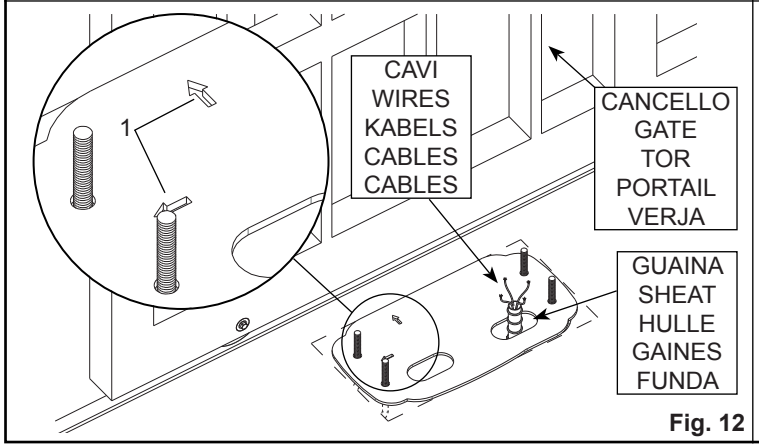


Fig. 12

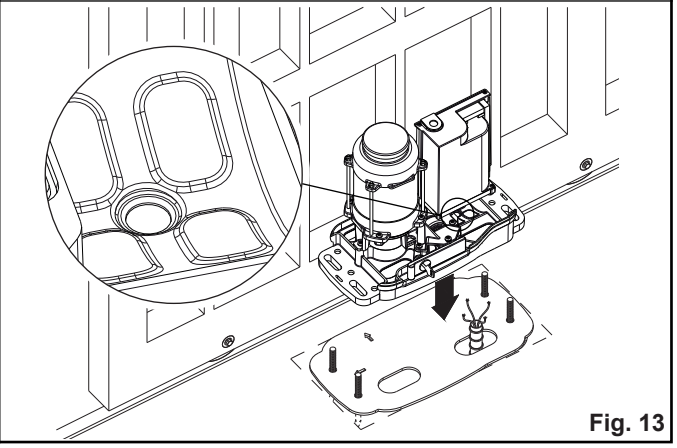


Fig. 13

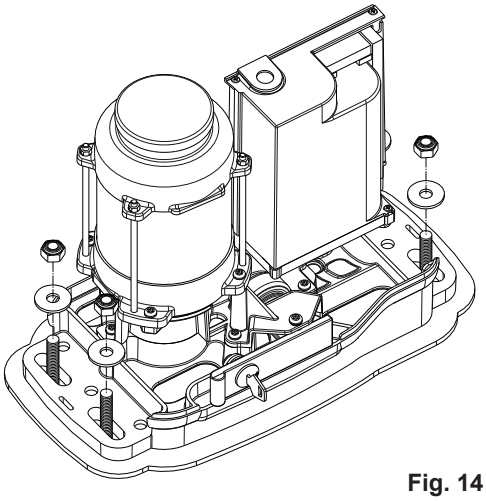


Fig. 14

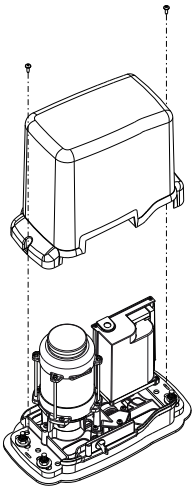


Fig. 15

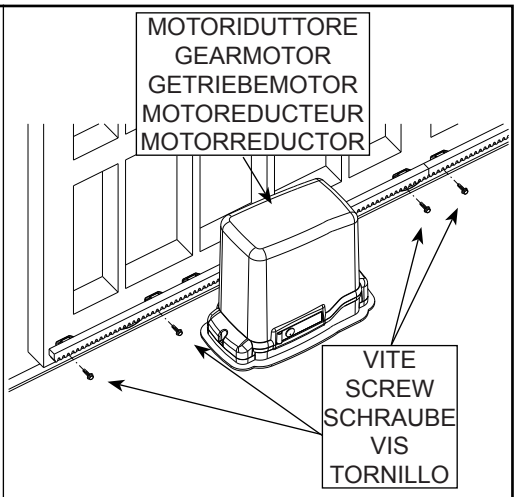


Fig. 16

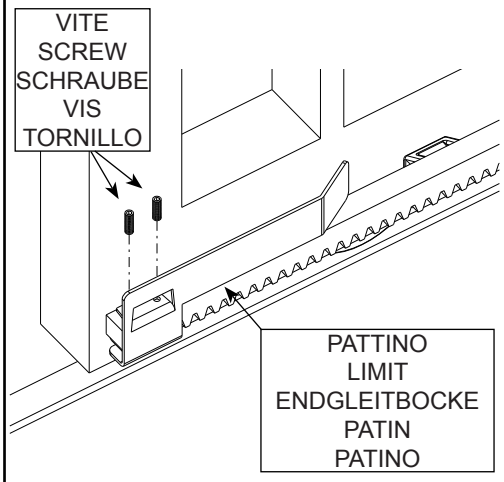


Fig. 17

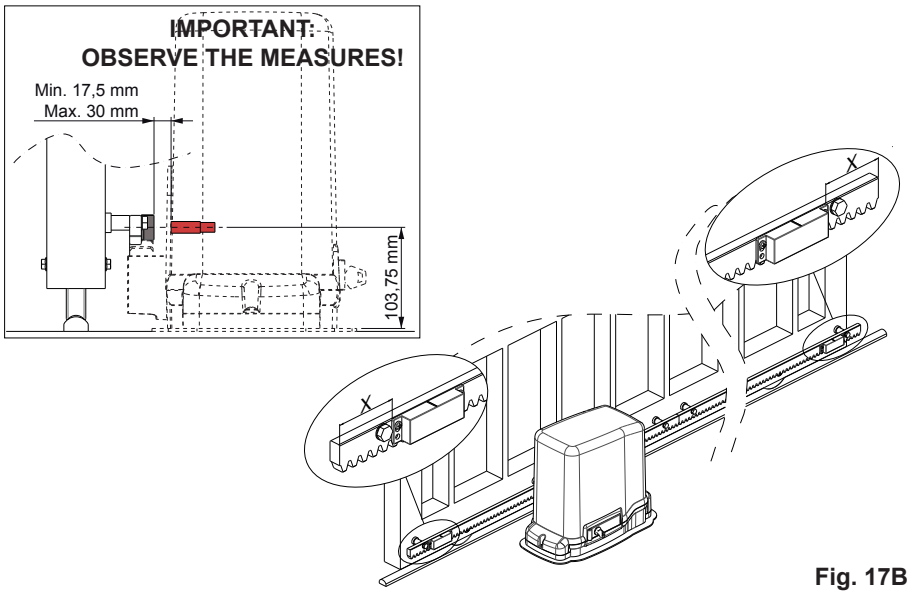


Fig. 17B

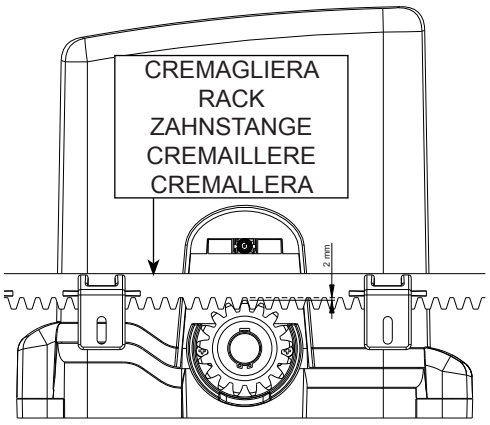


Fig. 18

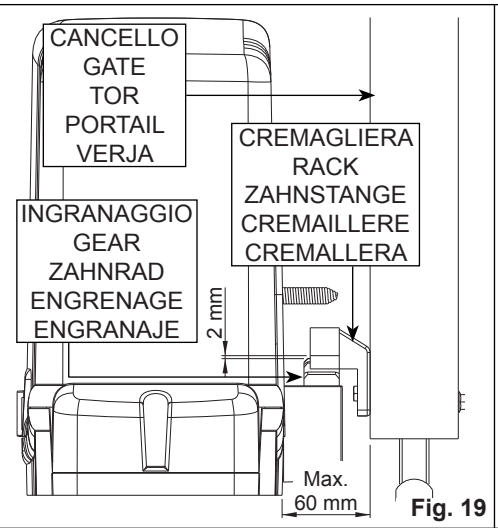


Fig. 19

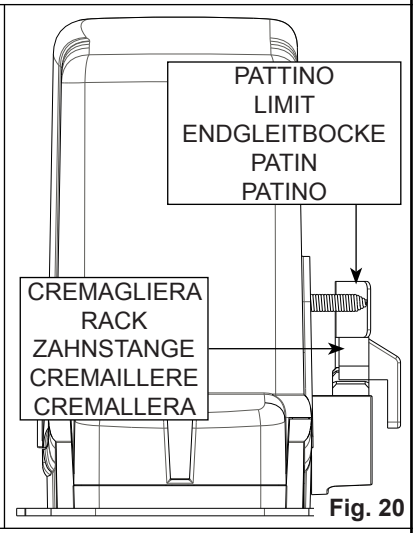


Fig. 20

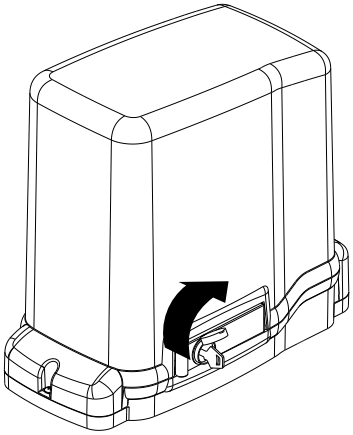


Fig. 21

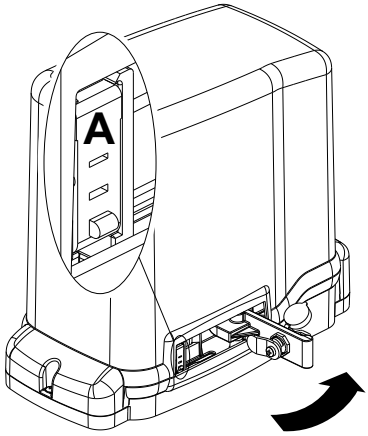


Fig. 22

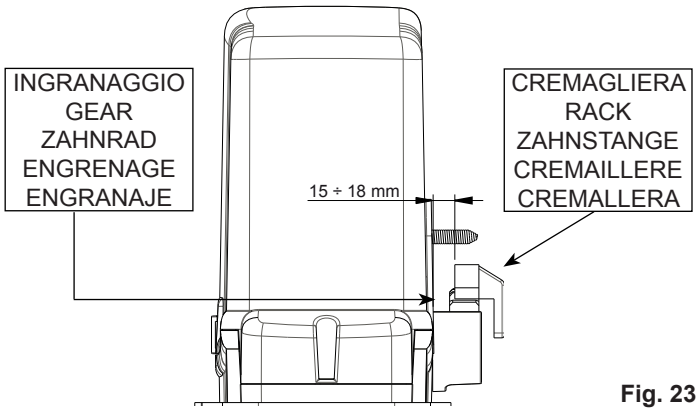


Fig. 23

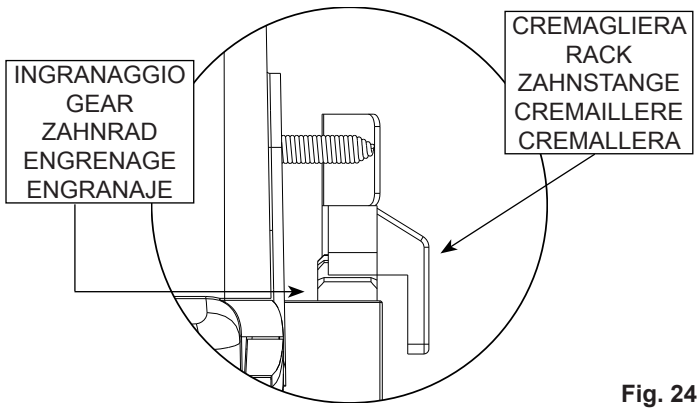


Fig. 24

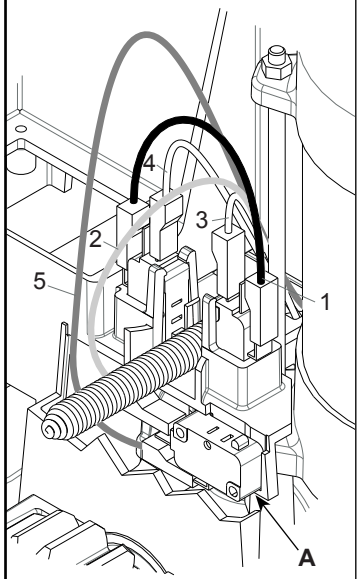


Fig. 25

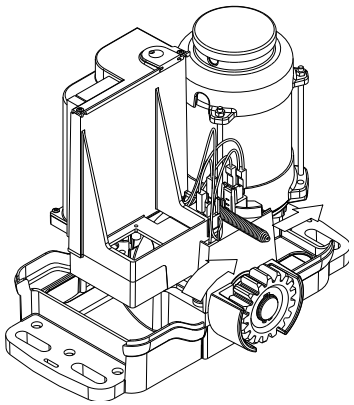


Fig. 26

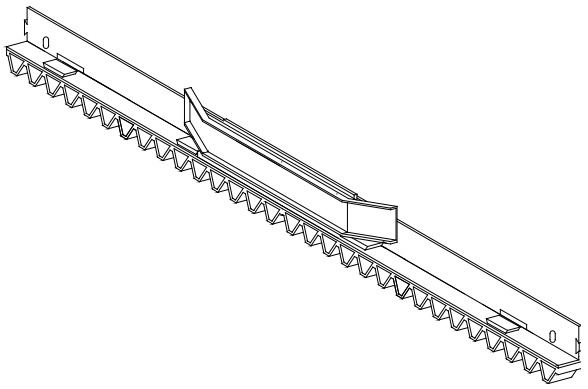


Fig. 27

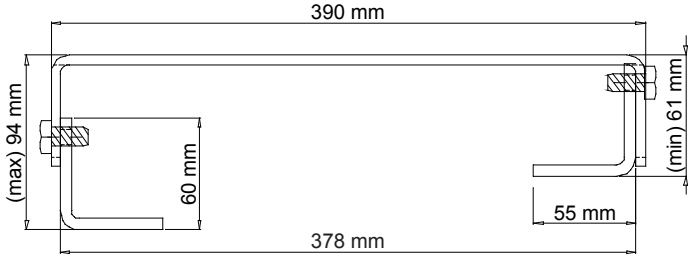


Fig. 28

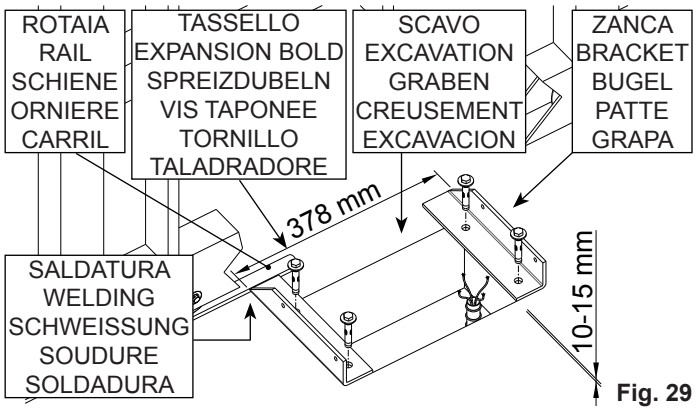


Fig. 29

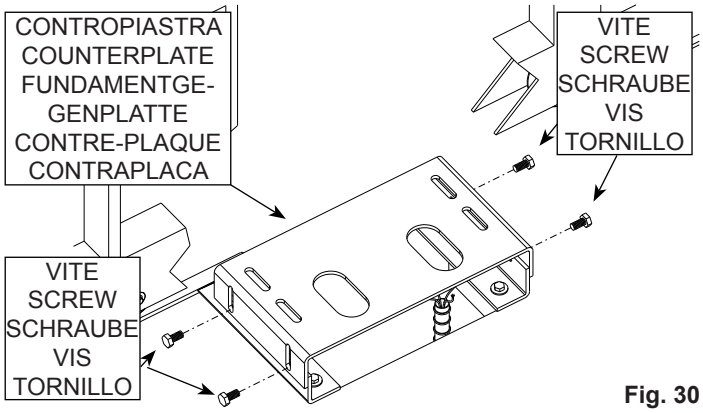


Fig. 30

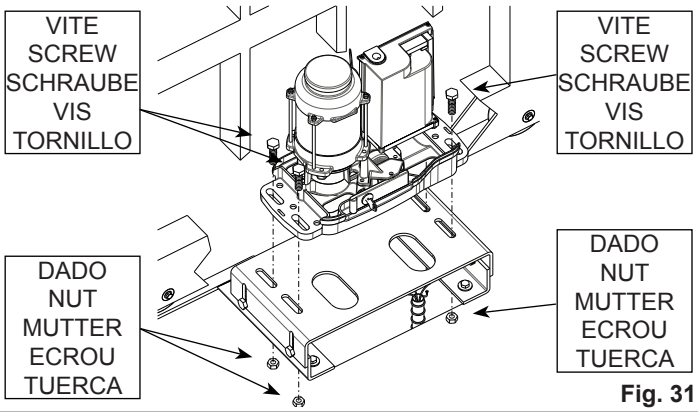


Fig. 31

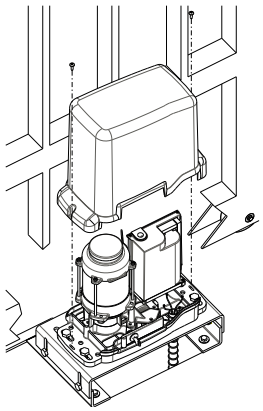


Fig. 32