

MASONRY 300

(1188618-1188620)

SEGATRICE
SCIE
SAWING MACHINE
MASCHINENSÄGE
TRONZADORA

- I** Manuale d'uso, manutenzione e ricambi
- F** Manuel utilisation entretien pieces de rechange
- GB** Operating, maintenance, spare parts manual
- D** Handbuch für Bedienung, Wartung und Ersatzteile
- E** Manual de uso, mantenimiento y recambios

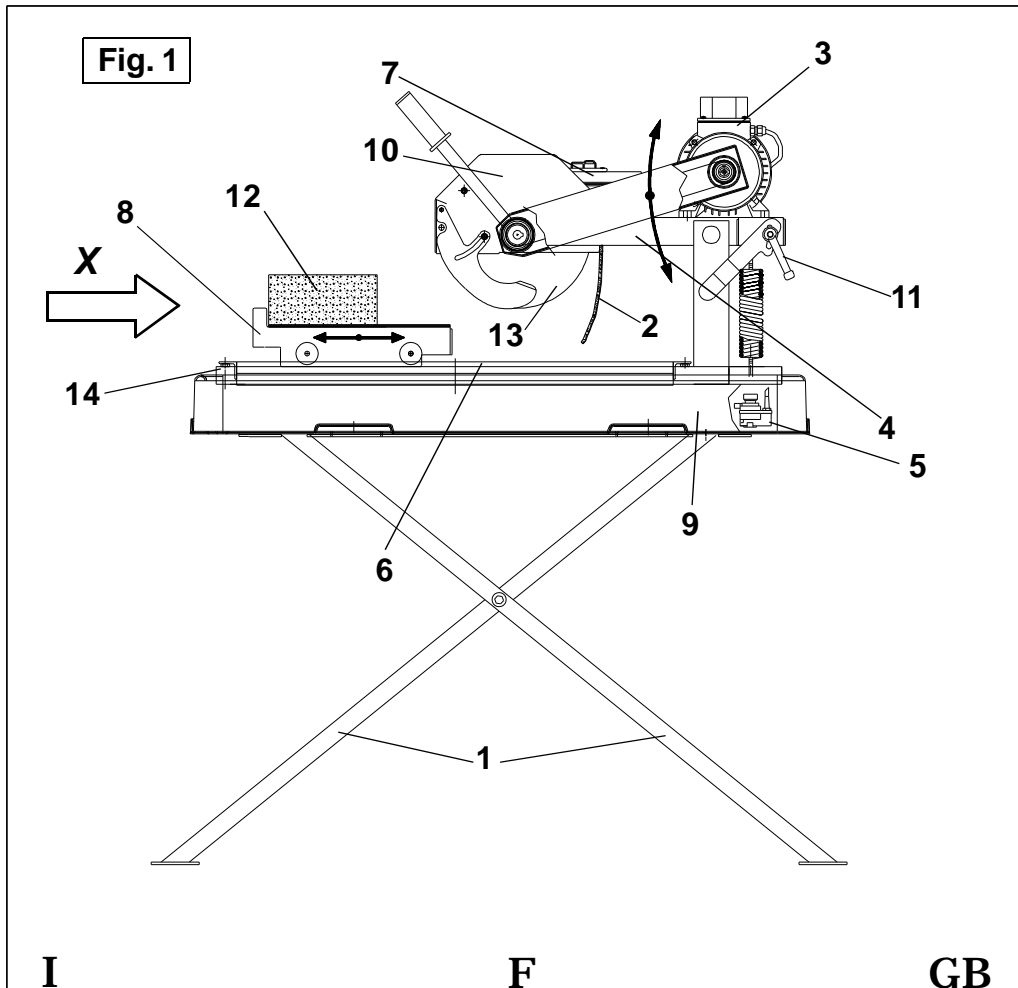


IMER[®]
INTERNATIONAL S.p.A.

IMER INTERNATIONAL S.p.A.
Loc. SALCETO - 53036 POGGIBONSI (SIENA)
(ITALY)
tel. 0577 97341 - fax 0577 983304

R01 - 2004/06
- Cod. 3210848 -





- | | | |
|---------------------------------|--------------------------------|----------------------------|
| 1. Cavalletto | 1. Chevalet | 1. Trestle element |
| 2. Grembialina paraschizzi | 2. Bavolet | 2. Spray guard |
| 3. Motore elettrico | 3. Moteur | 3. Motor |
| 4. Braccio portadisco | 4. Bras porte-lame | 4. Blade support |
| 5. Pompa acqua | 5. Pompe a eau | 5. Water pump |
| 6. Guida scorrimento | 6. Coulisse | 6. Guide |
| 7. Quadro elettrico | 7. Boiter électrique | 7. Junction box |
| 8. Carrello portapezzo | 8. Chariot porte-pièce | 8. Worktable |
| 9. Vasca acqua | 9. Cuve a eau | 9. Water tank |
| 10. Protezione lama | 10. Protection de la lame | 10. Blade guard |
| 11. Maniglia bloccaggio braccio | 11. Poignée de blocage du bras | 11. Support locking handle |
| 12. Pezzo da tagliare | 12. Pièce à couper | 12. Work piece |
| 13. Disco | 13. Lame | 13. Blade |
| 14. Telaio | 14. Châssis | 14. Frame |
| 15. Carter disco | 15. Carter disc | 15. Disc cover |

D

1. Gestel
2. Spritzschutz
3. Motor
4. Trennscheibenhaltung
5. Wasserpumpe
6. Gleitführung
7. Gehäuse
8. Werkstückschlitten
9. Wasserbecken
10. Sägeblattverkleidung
11. Halterungssperrgriff
12. Zu schneidendes Werkstück
13. Trennscheibe
14. Gestell
15. Scheibengehäuse

E

1. Cabalette
2. Placa delantal salpicaduras
3. Motor
4. Brazo portahoja
5. Bomba del agua
6. Guia de deslizamiento
7. Caja electra
8. Carro portapieza
9. Deposito de agua
10. Proteccion cuchilla
11. Manilla de bloqueo brazo
12. Pieza a cortar
13. Hoja
14. Bastidor
15. Cárter

Particolare attenzione deve essere fatta alle avvertenze contrassegnate con questo simbolo :
Il faut prêter une attention toute particulière aux notes précédées de ce symbole:
Special attention must be given to warnings with this symbol:
Lesen Sie die mit diesem Symbol bezeichneten Abschnitte mit besonderer Aufmerksamkeit:
Se tiene que prestar una atención especial a las indicaciones marcadas con el signo:



Dear Customer,

Congratulations on your choice of purchase: this IMER saw, the result of years of experience, is a fully reliable machine and is equipped with the latest technical innovations.

⚠ - WORKING IN SAFETY

To work in complete safety, read the following instructions carefully.

- This OPERATION AND MAINTENANCE manual must be kept on site by the person in charge, e.g. the SITE FOREMAN, and must always be available for consultation.

- The manual is to be considered part of the machine and must be kept for future reference (EN 292/2) until the machine is disposed of. If the manual is damaged or lost, a replacement may be requested from the saw manufacturer.

- The manual contains important information regarding site preparation, installation, machine use, maintenance procedures and requests for spare parts. Nevertheless, the installer and the operator must both have adequate experience and knowledge of the machine prior to use.

- To guarantee complete safety of the operator, safe operation and long life of equipment, follow the instructions in this manual carefully, and observe all safety standards currently in force for the prevention of accidents at work. Use personal protection (safety footwear, suitable clothing, gloves, goggles, etc.).

⚠ - Safety glasses or a protective visor must be worn at all times.

⚠ - Ear protection must be worn at all times.

⚠ - MAKE SURE THAT WARNING SIGNS ARE ALWAYS LEGIBLE.

⚠ - It is strictly forbidden to carry out any form of modification to the steel structure or working parts of the machine.

- IMER INTERNATIONAL declines all responsibility for non-compliance with laws and standards governing the use of this equipment, in particular; improper use, defective power supply, lack of maintenance, unauthorised modifications, and partial or total failure to observe the instructions contained in this manual. IMER INTERNATIONAL is entitled to modify the characteristics of the sawing machine and/or the contents of this manual without necessarily updating previous machines and/or manuals.

1. TECHNICAL DATA

Table 1 shows the saw's technical data, referring to figure 1.

TABLE 1			
TECHNICAL DATA		1188618	1188620
Blade rpm	rpm	2960	
Blade diameter	mm	300	
Blade mounting hole	mm	25,4	
Motor rating	Kw	2	
Voltage	V	230	110
Current	A	13,5	30
Frequency	Hz	50	
Motor rpm	rpm	2800	2780
Cutting table dimension	cm	315x365	
Overall dimensions (widthxlengthxheight)	cm	60x108x68	
Overall dimensions for transport (widthxlengthxheight)	cm	61x109x69	
Water pump flow rate	L/min	10	
Water tank capacity	L	42	
Weight	Kg	60	
Weight for transport	Kg	72	
Blade rotation direction (seen from blade clamping flange)	CLOCKWISE		

2. DESIGN STANDARDS

MASONRY 300 saws are designed and manufactured according to the following standards: EN 292-1-2; EN 12418; EN 60204-1.

3. NOISE EMISSION LEVEL

Table 2 indicates the noise level produced by the sawing machine, measured at the operator's ear (L_{PA} at 1 m - 98/37CE) and the environmental noise emission level (power L_{WA}) measured in accordance with EN ISO 3744; UNI EN 12418.

TABLE 2			
SAWING MACHINE	TYPE OF MOTOR	L_{PA} (dB)	L_{WA} (dB)
Masonry 300	ELECTRIC	85	96

4. CUTTING SPECIFICATIONS

This saw model has been specially designed for cutting stone, ceramics, marble, granite, concrete and similar materials. Only water-cooled diamond blades with continuous or segmented edges (see paragraph 13) must be used. Under no circumstances must dry cutting blades be used or materials other than those specified above. IMER INTERNATIONAL declines all responsibility for damage caused by improper use of the above machine.

5. CUTTING CAPACITY

- max. cutting capacity with vertical blade = 108mm in one single pass.
- max. height of workpiece: 190 mm (in two passes).
- max. height of workpiece: 50mm.
- max. cutting length: 365 mm (with blade lowered), 515 mm (with blade fully raised h=108).
- Blade at 45°: with support at 45° on the work surface.

6. WARNING

- Do not load the saw with workpieces that exceed the specified weight (max. 25 kg)
- Ensure stability of machine: it must be installed on a solid base with a maximum slope of 5° (fig. 2).
- Ensure the workpiece is stable before, during and after cutting: in any case, workpieces must not overhang the worktable.
- Respect the environment; use suitable receptacles for collection of cooling water contaminated with cutting dust.

7. SAFETY PRECAUTIONS

- IMER saws are designed for work on construction sites and under conditions of natural light, hence the workplace must be adequately lit.

⚠ - The machine must never be used in environments subject to risks of explosion and/or underground sites

- IMER saws may only be used when fitted with all required safety devices, which must be in perfect condition.
- Never use makeshift and/or faulty power cables.
- Make electrical connections on the construction site where they will not be subject to damage. Never stand the saw on power supply cables.
- Lay power cables in such a way as to prevent water penetration. Only use connectors fitted with water-spray protection (IP67, EEC).
- Repairs to electrical installations must only be carried out by qualified technicians. Always ensure that the machine is disconnected from the power supply and is completely immobile during repairs and maintenance operations.



Fig. 3

- The symbol shown on the label (see left) indicates the warning "ENSURE ALL PROTECTION DEVICES ARE INSTALLED AND IN PERFECT CONDITION BEFORE SWITCHING ON THE MACHINE" (fig.3).

8. ELECTRICAL SAFETY

IMER saws comply with EN 60204-1; and are fitted with:

- Protection device against automatic re-start after power failure.
- Short-circuit cutout device
- Motor overload cutout switch

9. TRANSPORTATION

⚠ - WARNING! Before moving the saw, lock head support carriage movement by means of the relative knob (Ref. 11, fig. 1).

The saw weights 53 Kg and can be moved by means of the side handles on the tank.

⚠ Always empty the tank before moving the machine.

10. INSTALLATION

The machine must be placed on a smooth surface that is at least as large as the tank, with the saw on the relative stand (Ref. 11, fig. 1). The correct side for the operator is as shown in Fig. 1 position X.

⚠ - Ensure that the stand is positioned on the relative inserts on the tank base and thus secured.

⚠ Always remove the plug from the mains power before moving the machine.

11. ELECTRICAL CONNECTION

Connect the mains power cable to the plug on the electrical panel.

RESIDUAL CURRENT CIRCUIT PROTECTION (KIT 230V-P/N.1169245 - KIT 110V-P/N.1169249):

⚠ It's obligatory to fit the saw with the differential switch kit P/N 1169249 on the feeding cable.

To start up the saw, press the green ON key on the RCCB switch and an orange led illuminates (RCCB protection on).

RESIDUAL CURRENT CIRCUIT BREAKER TEST:

Press the black key TEST on the RCCB; the switch disconnects and the orange led turns off.

After performing the TEST, press the ON key again to activate the RCCB.

⚠ Carry out the RCCB TEST before each machine start-up.

Then start the saw by support of the switch on the handle, comprising two buttons: green for start, red for stop. The RCCB is deactivated each time the power supply is disconnected

THERMAL CUTOUT PROTECTION:

⚠ - The electric motor is protected against overload by a thermal cutout; in the event of overheating this device shuts down the motor.

Cool the motor and restart by means of the RCCB switch and the main switch on the handle .

The machine is protected against short circuits by a magnetic protection inside the RCCB.

-Ensure that the mains voltage corresponds to that specified for the machine: 230V/50Hz. The electrical power cable must be suitably sized to avoid voltage drops. Cable drums must not be used.

Cables used on construction sites must be fitted with suitable external sheathing that is resistant to wear, crushing and extreme weather conditions (for example H07RN-F).

⚠ - All power supply installations must comply with CEI 64-8 standards (harmonised document CENELEC HD384).

12. MACHINE START-UP

Before connecting the machine to the power supply:

1 - Ensure that the tank contains sufficient cooling water.
 2-Connect the power supply cable to the electric panel plug.
 3-Turn on the concrete mixer using the switch located on the electric control panel (ref. 7, fig. 1) comprising two buttons: the green one switches on the machine, while the red one switches it off. The switch has minimum voltage protection: after a power failure or accidental power loss, push the green start button to start the machine up again.

4 - Check that the direction of blade rotation corresponds to that indicated by the arrow on the blade guard.

Open the valve and ensure sufficient flow of cooling water to

the diamond blade.

5 - Never dry cut material or cut when cooling water levels are low.

6 - If all is in order, proceed with cutting.

13. EMERGENCY STOP

⚠ - In case of an emergency, stop the machine by pressing the red stop button (extended), then disconnect the plug from the power supply socket.

⚠ - The motor is protected against automatic re-start after interruptions due to power failure. To resume operation, when power is re-connected, press the green switch on the overload cutout device.

14. BLADE INSTALLATION

Always remove the plug from the mains power.

The diamond blade is made of material that may be damaged when subject to high temperatures, and therefore must be cooled during the work phases.

To replace the blade, proceed as follows:

1. Block axial movement of the cutting head by means of the handwheels (ref.11 fig. 1).
2. Stop the blade rotation fitting the shaft blocking pin (ref. 1 fig. 5) in the hole of the belt cover (ref. 2 fig. 5) rotating the blade till the pin has entered the hole in the shaft. Verify that the blade doesn't turn, otherwise repeat the operation again.
3. Disassemble the front guard.
4. Loosen the locknut by rotating clockwise (left thread), using a 19 mm wrench.
5. Move the cutting head forward slightly and incline to remove the blade from its seat.
6. Ensure that there are no foreign objects between the fixing flange and diamond blade. During disassembly, avoid use of tools that could dent or deform the flange.
7. Insert the new blade proceeding in reverse order of the operation described at point 4. Take special care to ensure correct direction of rotation of the diamond blade.
8. Tighten the blade locknut fully down by rotating anticlockwise (left thread), to a torque of 40 Nm .
9. Take the shaft blocking pin off the belt cover.
10. Verify the blade turn freely.
11. Connect the plug again.

⚠ - Note that the blade must have an external diameter of 300 mm, a central hole diameter of 25.4 mm and max. thickness of 3 mm.

⚠ - Check that the blade to be used is suitable for the material to be cut.

⚠ - Never dry cut material or cut when cooling water levels are low.

⚠ - Do not use blades for wood!(fig. 6).

15. USE

⚠ - Leave a space of 150 cm around the machine to operate in full safety.

- Do not allow other persons to approach the machine during cutting.

- Never use the machine in fire-risk areas. Sparks can cause fire or explosions.

- Make sure that the machine is switched off before positioning or handling.

- Always ensure that the blade is free of any contact before start-up.

⚠ - Ensure correct installation of all protective devices.

Before starting work, fill the water tank. Top up during operation whenever necessary: N.B. the pump suction hose must always remain immersed in water.

- Insert the plug in the power socket.

⚠ - **WARNING!** For safety purposes the removal of protective guards from the machine is strictly prohibited

⚠ - **WARNING!** Always switch off the machine before

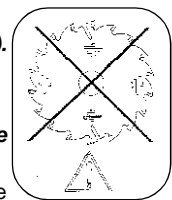



Fig. 6

carrying out blade adjustment.

15.1 VERTICAL BLADE MOVEMENT


To raise or lower the blade, slacken the support locking handle turning it anti-clockwise (Ref. 11, fig. 1). The blade support (Ref. 4, fig.1) remains free to rotate, so it can be secured in the desired position, fully tightening the handle (ref. 11, fig. 1).

 - **Ensure that the locking handle is tightened fully before starting work.**

15.2 BLADE POSITIONING FOR 45° CUTS

To make a cut at 45°, the 45° support on the carriage is necessary. Once the workpiece is correctly positioned, cutting can begin, starting the electric motor.


15.3 CUTTING

 - **Check that the blade is aligned with the cutting line.**

- Place the workpiece on the worktable (ref. 8, fig. 1), resting firmly against the stop. Start the motor.

Wait until the water reaches the blade. Begin cutting.

- Horizontal cutting movement is carried out by pulling the carriage towards the blade.

 - **As cutting thickness increases, the blade is subjected to greater stress. To avoid overloading the motor, the operator should continually check blade feed speed. The speed will also depend on the characteristics of the material being cut (hardness, toughness etc.).**


15.3.1 CUTS WITH BLADE LOWERED FROM ABOVE

Bring the blade support to its highest position and lock. Position the workpiece. Start the machine, unlock the blade support and begin vertical cutting until the blade reaches its lowest point. Lock the support once more and proceed with horizontal cutting


15.3.2 BLADE CHANGE

To change the blade refer to section 13.

16. MAINTENANCE

 - **WARNING! Servicing must always be carried out by qualified technicians and only after the motor has been switched off.**

 - **Always keep the guards in proper working order and free from damage.**

 - **As there is the continuous risk of inadvertent damage to the electric cables, these must be checked regularly each time before the machine is used.**

Never leave the machine out in the open. Make sure that it is stored in a sheltered area away from extreme weather conditions.

Below is a list of the cleaning operations that must be carried out at the end of every shift.

16.1 TANK CLEANING ON WORK COMPLETION

- Empty the tank by removing the plug. Remove cutting residue using a jet of water.

16.2 WORK SURFACE CLEANING

Always keep work surfaces clean. Residual dirt can impair cutting precision.

16.3 GUIDE RAIL CLEANING

It is good practice to remove all traces of dirt from the guides.

16.4 CLEANING AND MAINTENANCE OF COOLING CIRCUIT

- If water does not reach the blade stop the machine immediately to avoid blade damage.

- After switching off the machine ensure that the water level is sufficient.

At regular intervals (or when the flow rate of the blade cooling water is reduced) clean the cooling water supply circuit. To do this, disassemble the delivery nozzle located inside the blade guard and clean in water.

Periodically clean the cooling water delivery line between the

pump and valve, and blade guard using water.

16.5 TENSIONING THE DRIVE BELT (fig. 8)

- Switch off the electric motor and remove the plug from the power supply.


- Unscrew the 4 screws that secure the movable belt guard (ref. 1).

- Loosen the 4 (ref. 2) screws that clamp the electric motor to the blade support.

- Tension the belt using the nut (ref. 3): apply a force of about F=6 Kg to the centre of the free section of the belt, the arrow should be about f=6 mm (fig. 9).

- Tighten the screws on the electric motor, checking the alignment of the motor pulley and the blade pulley


- Refit the guard and lock it using the 4 screws.

 - **To avoid shortening the life of the belt, the bearings and the blade shaft, do not overtension the belt. Finally, check the two pulleys are aligned**


16.6 DRIVE BELT REPLACEMENT

Repeat the operations described in section 16.5, replacing the belt before tensioning it

17. REPAIRS

 - **Do not start the saw during repair work.**

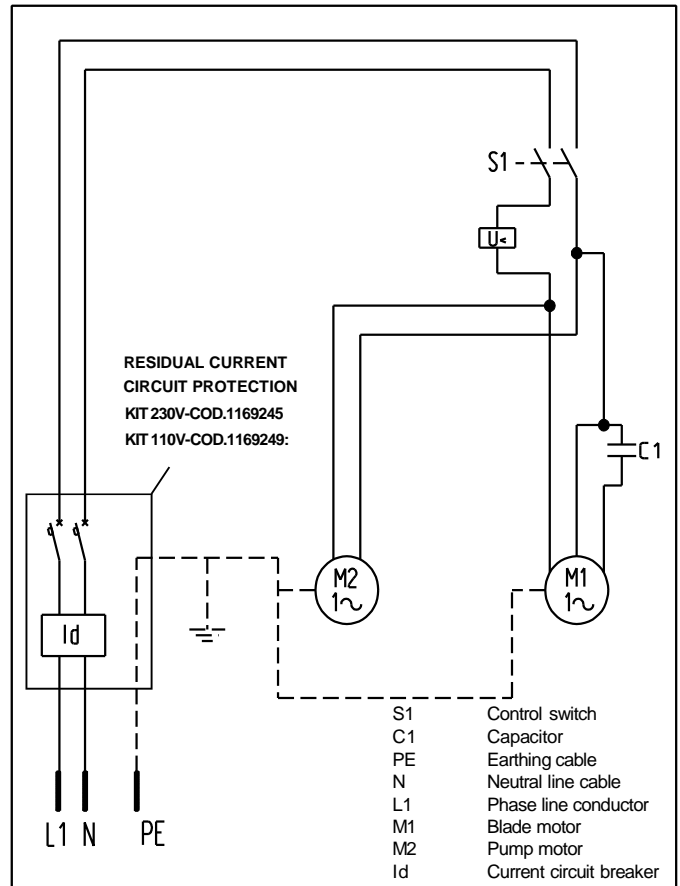
Only use genuine IMER spare parts and do not modify them.

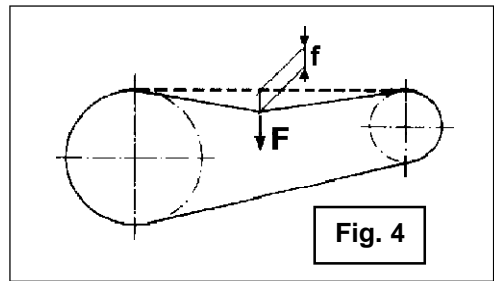
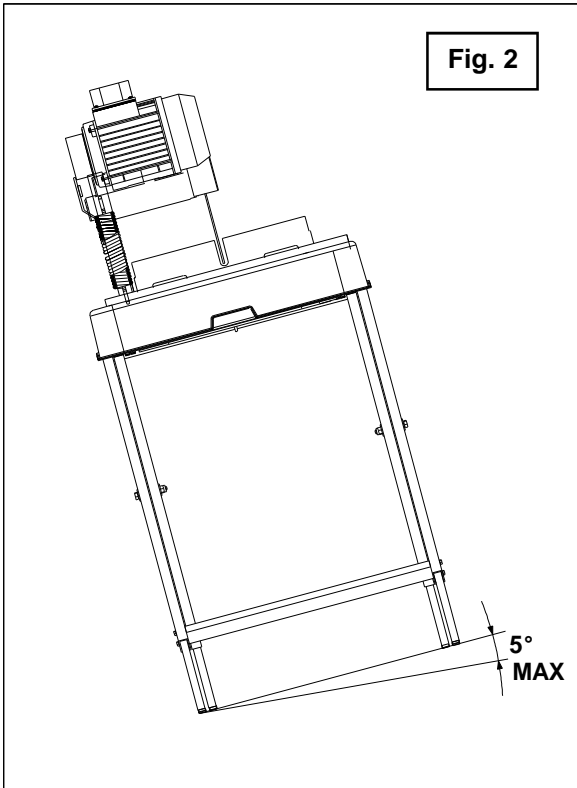
 - **If the guards are removed to carry out repairs, they must be refitted properly when the repair work is finished.**

18. TROUBLESHOOTING

⚠ - WARNING! Before carrying out any maintenance operations, switch off the machine, and remove the plug from the power socket

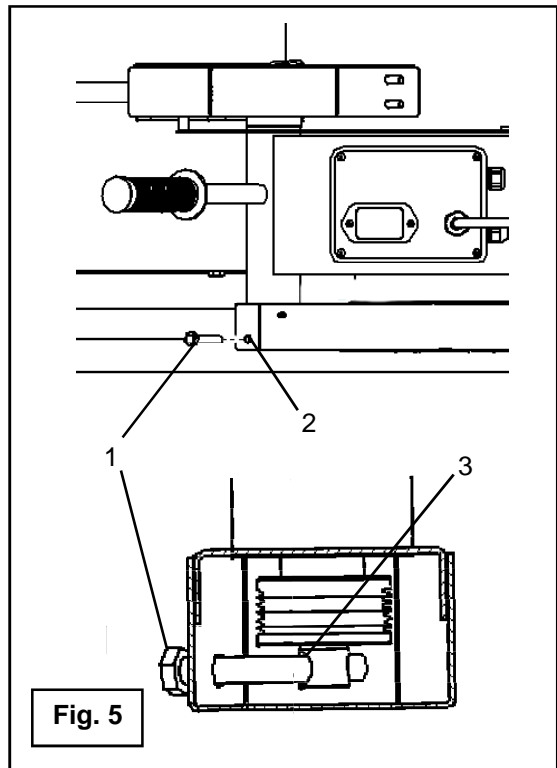
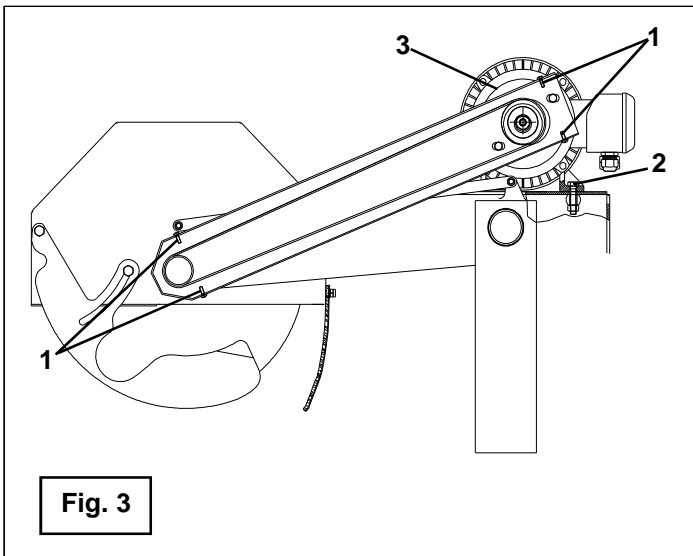
FAULT	CAUSE	REMEDY
Motor does not start when switch is turned	<ul style="list-style-type: none"> - Defective power cable - Plug not inserted in socket correctly - Power cable from plug to control panel detached - Loose wire inside motor circuit board - A wire has become disconnected inside the panel - Faulty main switch - The overload safety device has been activated. 	<ul style="list-style-type: none"> - Check power cables - Ensure correct connection - Connect cable- re -Connect wire - Remake the connection - Replace switch -Wait for a few minutes and then try restarting the machine.
Vertical blade movement not smooth	<ul style="list-style-type: none"> - locking knob too tight 	<ul style="list-style-type: none"> - Slacken knob
Horizontal carriage movement not smooth	<ul style="list-style-type: none"> - Guide rails dirty 	<ul style="list-style-type: none"> - Clean the guide rails
Lack of cooling water supply to blade	Refer to section : "cleaning and maintenance of cooling circuit"	
Blade does not cut	<ul style="list-style-type: none"> - Blade is worn - Drive belt not tensioned 	<ul style="list-style-type: none"> - Fit new blade -Tension the belt
Motor starts but blade does not rotate	Belt is broken	Replace drive belt





Masonry 300 - Tab. 3

Lunghezza cavo (m) Longueur câble (m) Cable length (m) Kabel Länge (m) Longitud cable (m)	V 230 I= 13.5 A	0 ÷ 9	10 ÷ 16	17 ÷ 25
	V 110 I= 30 A	-	-	0 ÷ 15
sezione cavo (mm ²) section câble (mm ²) cable (mm ²) kabel (mm ²) cable (mm ²)		1.5	2.5	4





RICAMBI: Per tutti gli ordini dei pezzi di ricambio vogliate indicare: 1- Tipo di macchina. 2- Numero di codice e di riferimento collocato in corrispondenza di ogni definizione. 3- Numero di serie e anno di costruzione riportato sulla targhetta della macchina. **SIMBOLOGIA:** Intercambiabilità (esempio): Fino alla macchina matricola N° 5240 è stato installato il rif. 1 cod.3204530, dalla macchina matricola N° 5241 è stato installato il rif. 1.1 cod.3204520. Il rif. 1.1 è intercambiabile (↔) con il rif. 1. Non sono intercambiabili il rif. 1 e rif. 1.1 se in tabella è presente il simbolo (↔X).

PIECES DE RECHANGE: Pour toutes les commandes de pièces de rechange, veuillez indiquer: 1- Le Type de machine 2- Le Numéro de code et de référence se trouvant en face de chaque définition 3- Le Numéro de série et l'année de construction se trouvant sur la plaque d'identification de la machine

SYMBOLOGIE: Intercambiabilità (ejemplo): Jusqu'à la machine matricule N° 5240, nous avons installé la réf. 1 code 3204530; à partir de la machine matricule N° 5241, nous avons installé la réf. 1.1 code 3204520. La réf. 1.1 est interchangeable (↔) avec la réf. 1. Les réf. 1 et réf. 1.1 ne sont pas interchangeables si le symbole (↔X) n'est pas sur le tableau.

SPARE PARTS: All orders for spare parts must indicate the following: 1- Type of machine. 2- Part number and position number of each part. 3- Serial number and year of manufacture reported on the machine's identification plate.

SYMBOL: Interchangeability (example): Pos..1 P.n. 3204530 was installed on machines up to N° 5240 and Pos.1.1 P.n. 3204520 installed on machine N° 5241 onwards. Pos. 1.1 is interchangeable (↔) with Pos.

1.Pos. 1 and Pos. 1.1 are not interchangeable if the (↔X) symbol appears in the table.

ERSATZTEILE: Für Ersatzteilbestellungen bitte die folgenden Angaben machen: 1) Maschinentyp 2) Jeweils zugeordnete Art.-Nr. und Positionsnummer 3) Seriennummer und Baujahr (Angabe auf dem Maschinenschild)

SYMBOL: Austauschbarkeit (Beispiel): Bis zur Maschinennummer 5240 ist Ref. 1 Cod. 3204530 und ab Maschinennummer 5241 ist Ref. 1.1 Cod. 3204520 installiert worden. Ref. 1.1 und Ref. 1 sind austauschbar (↔). Ref. 1 und Ref.1.1 sind nicht austauschbar, wenn das Symbol (↔X) angegeben ist.

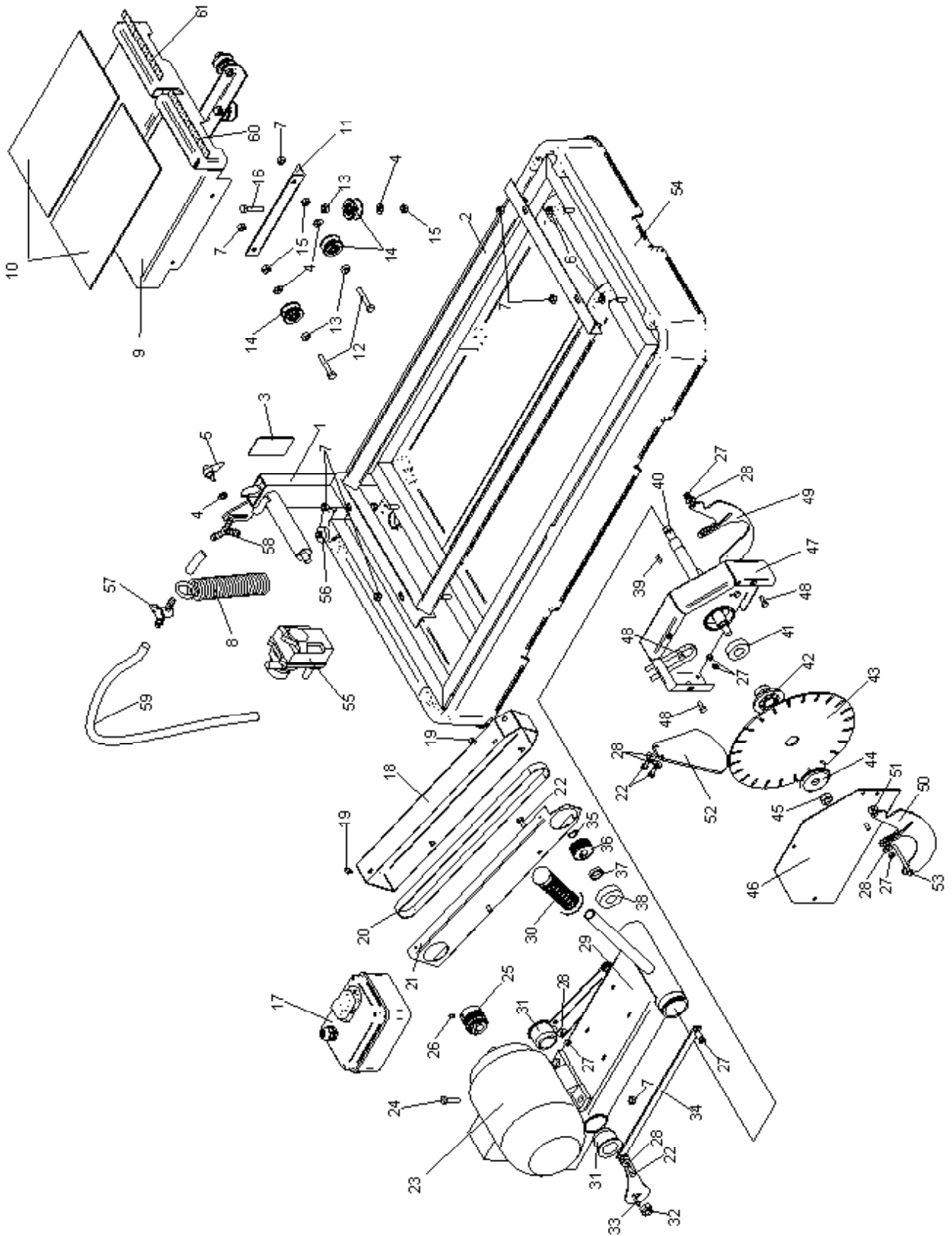
PIEZAS DE RECAMBIO: Para pedir una pieza de recambio hay que indicar siempre: 1- El tipo de máquina. 2- Los números de código y de referencia indicados en correspondencia de cada definición. 3- El número de serie y el año de construcción indicados en la placa de la máquina.

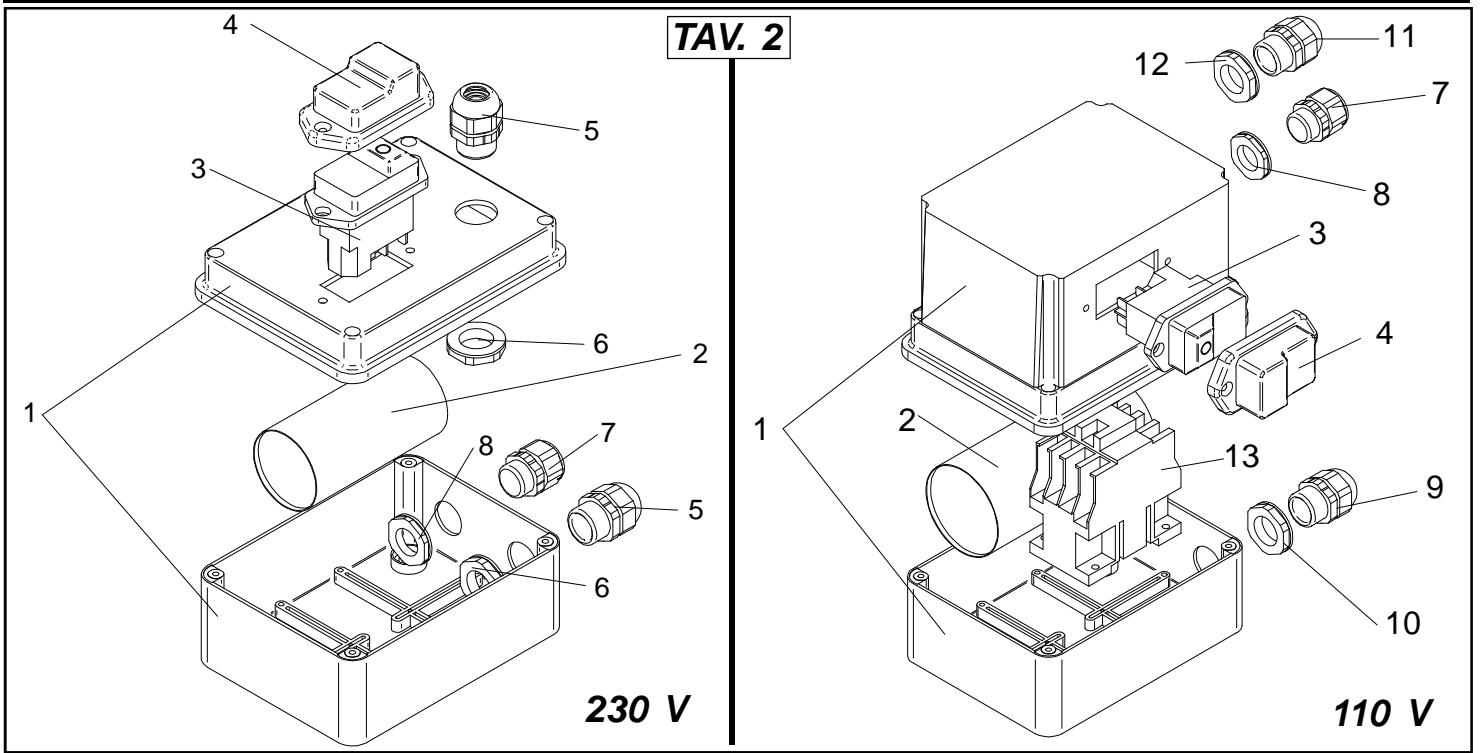
SIMBOLOGIA: Intercambiabilidad (ejemplo): Hasta el equipo con matricula N° 5240, se ha instalado la pieza con ref. 1 y cód. 3204530; a partir de la máquina con matricula N° 5241, se ha instalado la pieza con ref. 1.1 y cód. 3204520. La pieza con ref. 1.1 se puede intercambiar (↔) con la pieza con ref. 1. Si en tabla se halla presente el símbolo (↔X), las piezas con referencia 1 y 1.1 no son intercambiables.

Rif.	Cod.	I	F	GB	D	E	Note
1	3204530	Riduttore	Réducteur	Reducer	Untersetzungsgetriebe	Reductor	5240
2	3204520	Riduttore	Réducteur	Reducer	Untersetzungsgetriebe	Reductor	5241

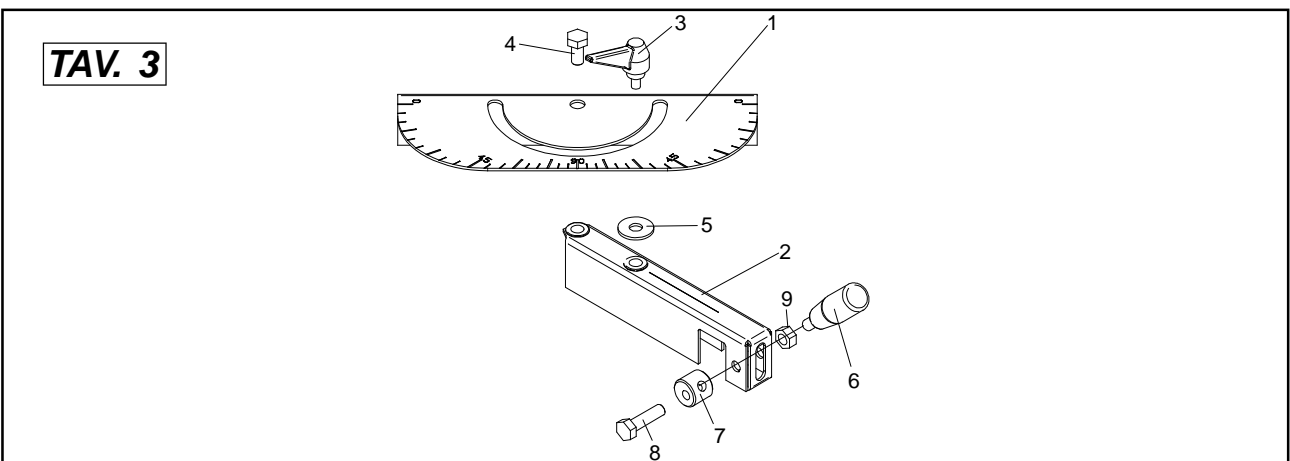
TAV.1 STRUTTURA MACCHINA - STRUCTURE MACHINE - MACHINE STRUCTURE - MASCHINENAUFBAU - ESTRUCTURA DE LA MAQUINA							
RIF.	COD.	I	F	GB	D	E	NOTE
1	3210843	TELAIO	CHASSIS	FRAME	RAHMEN	BASTIDORENT	
2	3210789	CONTROTELAIO	CONTRE-CHÂSSIS	COUNTER-FRAME	GEGENRAHMEN	CONTRA- BASTIDOR	
3	3210847 3210918	TARGHETTA MACCHINA	ETIQUETTE	LABEL	KLEBEZETTEL	ETIQUETA	230V/50HZ 110V/50HZ
4	2224140	ROSETTA	RONDELLE	WASHER	UNTERLEGSCHLEIBE	ARANDELA	6593 8X18 Z
5	3208414	LEVA A SCATTO	LEVIER	LEVER	HEBEL	PALANCA	
6	3207129	DADO	ECROU	NUT	MUTTER	TUERCA	5589 M8 Z
7	2223923	DADO AUTOBLOCCANTE	ECROU DE SURETE	SELF LOCKING NUT	SELBSTSICHERNDE MUTTER	TUERCA AUTOBLOCCANTE	7473 M8 Z
8	3210152	MOLLA	RESSORT	SPRING	FEDER	MUELLE	
9	3210760	CARRELLI	CHARIOT	CARRIGE	WAGEN	CARRO	
10	3210767	RIVESTIMENTO IN GOMMA	REVETEMENT IN CAOUTCHOUC	RUBBER COATING	GUMMI BEKLEIDUNG	GOMA REVESTIMIENTO	
11	3210765	LAMIERA SLITTA CARRELLI	TÔLE GLISSE-CHARIOT	SLIDE-TROLLEY SHEET	SCHLUPFKARREN-BLECH	CHAPA DESLZA CARRO	
12	1222050	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M8X50 Z
13	3210766	DISTANZIALE	ENTRETOISE	SPACER BRACKET	DISTANZHULSE	ESPACIADOR	
14	3207525	RUOTA	ROUE	WHELL	RAD	RUEDA	
15	2223570	DADO	ECROU	NUT	MUTTER	TUERCA	5588 M8 Z
16	2222190	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M8X40 Z
17	3210853 3210915	QUADRO ELETTRICO	BOITER ELETRIQUE	JUNTION BOX	GEHAUSE	CAJA ELECTRA	230V/50HZ 110V/50HZ
18	3210804	CARTER CINGHIE EXT.	CARTER EXÉTERIEUR COURROIS	BELTS EXETRNAL COVER	RMEN AUSSENSCHUTZHAUBE	CÁRTER EXETERIOR CORERAS	
19	2222420	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	6950 4.8X13 Z
20	3208791	CINGHIA	COURROIE	BELT	RIEMEN	CORREA	340J6
21	3210805	CARTER CINGHIE INT.	CARTER INTÉRIEUR COURROIS	BELTS INTERNAL COVER	RMEN INNENSCHUTZHAUBE	CÁRTER INTERIOR CORERAS	
22	2222021	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M6X16 Z
23	3210854 3210915	MOTORE ELETTRICO	MOTEUR	MOTOR	MOTOR	MOTOR	kW.2 230V/50HZ kW.2 110V/50HZ
24	2222006	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M8X30 Z
25	3210806	PULEGGIA MOTORE	POULIE	PULLY	RIEMENSCHLEIBE	POLEA	D.40 J6
26	2225146	GRANO	VIS	GRUB-SCREW	DÜBEL	TORNILLO	5923 M6X10 Z
27	2223924	DADO AUTOBLOCCANTE	ECROU DE SURETE	SELF LOCKING NUT	SELBSTSICHERNDE MUTTER	TUERCA AUTOBLOCCANTE	M6 Z
28	2224531	ROSETTA	RONDELLE	WASHER	UNTERLEGSCHLEIBE	ARANDELA	6593 6X18 Z
29	3210779	GRUPPO TESTA DI TAGLIO	GROUPE TÊTE DE COUPE	CUTTING HEAD GROUP	SCHNEIDKOPF-GRUPPE	GRUPO CABEZA DE CORTE	
30	2288885	MANOPOLA	POIGNÉE	HANDGRIP	GRIF	EMPUÑADA	
31	2209400	BOCCOLA	DOUILLE NYLON	NYLON BUSHING	NYLON-BUCHSE	MANGUITO NYLON	
32	2223921	DADO AUTOBLOCCANTE	ECROU DE SURETE	SELF LOCKING NUT	SELBSTSICHERNDE MUTTER	TUERCA AUTOBLOCCANTE	M12 Z
33	2228395	SPINA ELASTICA	FICHE	PIN	STECKER	CLAVIJA	1481 5X20
34	3210803	ASTA REGOLAZIONE ROTAZIONE	TIGE	ROD	STAB	VARILLA	
35	2227320	ANELLO ARRESTO	BAGUE D'ARRET	STOP RING	ARRETIERRING	ANILLO DE PARADA	7435 E/20
36	3208919	PULEGGIA	POULIE	PULLY	REMENSCHLEIBER	POLEA	
37	3209055	DISTANZIALE	ENTRETOISE	SPACER BRACKET	DISTANZHULSE	ESPACIADOR	
38	3208622	CUSCINETTO	ROULEMENT	BEARING	LAGER	COJINETTE	6204 2RS FAG-SKF
39	2229250	LINGUETTA	LANGUETTE	LEVER	HEBEL	PALANCA	5X5X15
40	3210808	ALBERO DISCO	ARBRE	SHAFT	WELLE	EJE	
41	3210815	CUSCINETTO	ROULEMENT	BEARING	LAGER	COJINETTE	6004 2RS FAG-SKF
42	3210046	FLANGIA	FLASQUE	OUTER	FLANSCH	BRIDA	
43	1193898	DISCO	DISCQUE	DISCK	KERAMIKSCHEIBE	DISCO	
44	3210812	FLANGIA	FLASQUE	OUTER	FLANSCH	BRIDA	
45	3210053	DADO	ECROU	NUT	MUTTER	TUERCA	5588 M12 Z SX
46	3210859	CARTER LAMA	CARTER LAME	BLADE COVER	SCHLEIBENGÉHAUSE	CÁRTER HOJA	
47	3210856	CARTER DISCO	CARTER DISC	DISC COVER	SCHLEIBENGÉHAUSE	CÁRTER	
48	2222021	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M6X16 Z
49	3210862	PROTEZIONE DX DISCO	PROTECTION DISQUE DX	DISK PROTECTION DX	SCHUTZSCHEIBE	PROTECCIÓN DISCO DX	
50	3210863	PROTEZIONE SX DISCO	PROTECTION DISQUE SX	DISK PROTECTION SX	SCHUTZSCHEIBE	PROTECCIÓN DISCO SX	
51	3210576	ROSETTA NYLON	RONDELLE NYLON	NYLON WASHER	UNTERLEGSCHLEIBE	ARANDELA NYLON	8.4X17X1.5
52	3210206	ROSETTA	RONDELLE	WASHER	UNTERLEGSCHLEIBE	ARANDELA	
53	3210842	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5739 M6X70 Z
54	3210055	VASCA	CUVE	TANK	BECKEN	RECIPIENTE	
55	3210870 3210527	POMPA ACQUA	POMPE À EAU	WATER POMP	WASSERPUMPE	BOMBA DEL AGUA	S0 230V/50HZ S0 110V/50HZ
56	2235429	TAPPO VASCA	BOUCHON	CAP	STOPFEN	TAPÓN	
57	3207884	RUBINETTO ACQUA	ROBINET	COCK	HAHN	GRIFO	
58	2226850	RACCORDA A "Y"	RACCORD À Y	Y SHAPED JOINT	"Y" VERBINDUNGSSTÜCK	TUBERIA A Y	
59	2292365	TUBO ACQUA	TUBE	TUBE	ROHR	TUBO	
60	3210763	ADESIVO BATTUTA DX	ADHESIF BUTÉE DROITE	RIGHT FENCE ADHESIVE LABEL	SHILD RECHTER ANSCHLAG	ADHESIVO TOPE DERECHO	
61	3210764	ADESIVO BATTUTA SX	ADHESIF BUTÉE GAUCHE	LEFT FENCE ADHESIVE LABEL	SHILD LINKER ANSCHLAG	ADHESIVO TOPE IZQUIERDO	

TAV.1



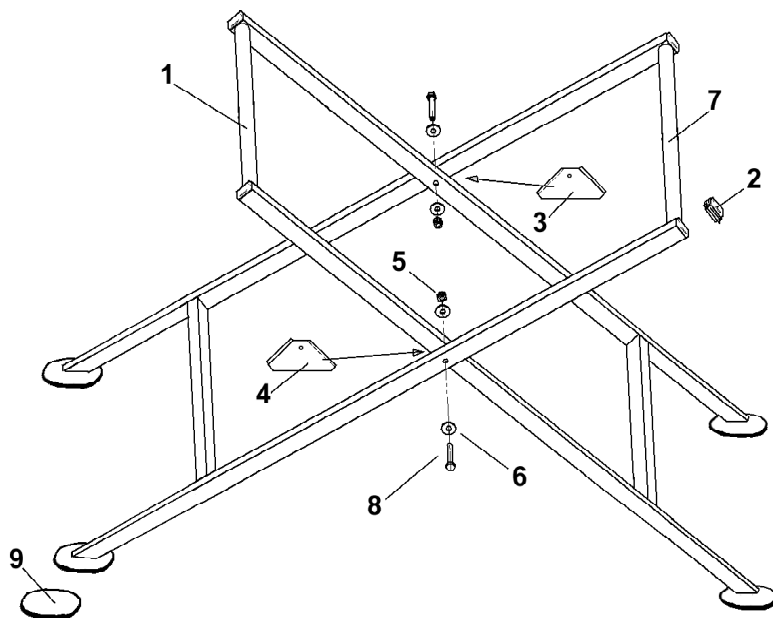


TAV.2 QUADRO ELETTICO - TABLEAU ELECTRIQUE - ELECTRIC PANEL - SCHALTSCHRANK - CUADRO ELÉCTRICO: 3210853(230V/50HZ) - 3210914(110V/50HZ)							
RIF.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPCION	NOTE
1	3210869 3210930	CASSETTA ELETTRICA	BOTIER ÉLECTRIQUE	JUNCTION BOX	GEHÄUSE	CAJA ELÉCTRICA	230 V / 50HZ 110 V / 50HZ
2	3203047 3210925	CONDENSATORE	CONDENSATEUR	CAPACITOR	KONDENSATOR	CONDENSADOR	(230V) 50 µ -450 V (110V) 80 µ -450 V
3	3209337 3210872	INTERRUTTORE	INTERRUPTEUR	SWITCH	SCHALTER	INTERRUPTOR	230V / 50HZ 110V / 50HZ
4	3209340	PROTEZIONE TRASPARENTE	PROTECTION TRANSPARENTE	LEAKAGE PROTECTION	DURCHSICHTIGER SCHUTZ	PROTECCIÓN TRANSPARENTE	
5	3201216	PRESSACAVO	SERRE-CÂBLE	CABLE CLAMP	KABELKLEMME	PRENSACABLES	PG 13.5 (230V)
6	2278063	DADO PRESSACAVO	ECROU	NUT	MUTTER	TUERCA	PG 13.5 (230V)
7	3201217	PRESSACAVO	SERRE-CÂBLE	CABLE CLAMP	KABELKLEMME	PRENSACABLES	PG 11 (230V)
8	1283980	DADO PRESSACAVO	ECROU	NUT	MUTTER	TUERCA	PG 11 (230V)
9	3201442	PRESSACAVO	SERRE-CÂBLE	CABLE CLAMP	KABELKLEMME	PRENSACABLES	PG 16 (110V)
10	2278062	DADO PRESSACAVO	ECROU	NUT	MUTTER	TUERCA	PG 16 (110V)
11	3209691	PRESSACAVO	SERRE-CÂBLE	CABLE CLAMP	KABELKLEMME	PRENSACABLES	PG 21 (110V)
12	1283984	DADO PRESSACAVO	ECROU	NUT	MUTTER	TUERCA	PG 21 (110V)
13	3210924	CONTATTORE	CONTACTEUR	CONTACTOR	KONTAKGLIED	CONTACTOR	110V / 50HZ



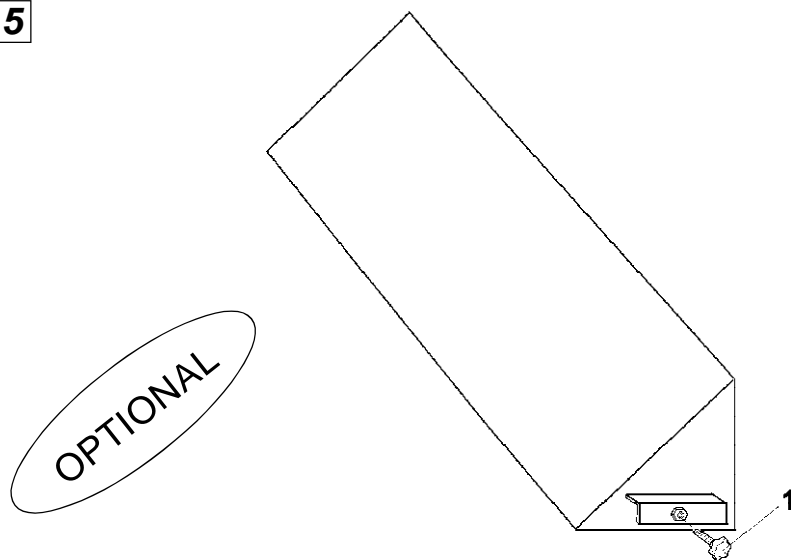
TAV. 3 - GONIOMETRO - GONIOMÈTRE - GONIOMETER - WINKELMESSER - GONIÓMETRO: 3210835							
RIF.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPCION	NOTE
1	3210832	LAMIERA GONIOMETRO	TÔLE GONIOMETRE	PROTRACTOR SHEET	WINKELMESSER-BLECH	CHAPA GONIOMETRO	
2	3210834	SUPPORTO GONIOMETRO	SUPPOR GONIOMÈTRE	PROTRACTOR SUPPORT	WINKELMESSER-HALTER	SOPORTE GONIOMETRO	
3	3208414	LEVA A SCATTO	LEVIER	LEVER	HEBEL	PALANCA	
4	3208416	PERNO GONIOMETRO	PIVOT GONIOMÈTRE	PROTRACTOR PIN	WINKELMESSER-BOLZEN	PERNO GONIOMETRO	
5	2224140	ROSETTA	RONDELLE	WASHER	UNTERLEGSCHIBE	ARANDELA	6593 8x18 Z
6	3209333	POMELLO	POIGNÉE	KNOB	KNOPF	POMO	
7	3209332	ECCENTRICO	EXCENTRIQUE	CAM	EXZENTERBUCHSE	EXCÉNTRICO	
8	2222018	VITE	VIS	SCREW	SCHRAUBE	TORNILLO	5737 M8X35 Z
9	2223923	DADO AUTOBLOCCANTE	ECROU DE SURETE	SELF LOCKING NUT	SELBSTSICHERNDE MUTTER	TUERCA AUTOBLOCCANTE	7473 M8 Z

TAV. 4



COD.3210080		TAV4 - CAVALLETTO - CHEVALET - TRESTLE ELEMENT - GESTEL - CABALETTE					
Rif.	Cod.	I	F	GB	D	E	
1	3210645	CAVALLETTO INTERNO	CHEVALET INTÉRIEUR	INTERNAL TRESTLE ELEMENT	INNERES GESTEL	CABALETTE INTERNO	
2	3206205	TERMINALE	EMBOUT	TERMINAL	ENDVERSCHLAG	TERMINAL	
3	3207193	BATTUTA DESTRA	BUTÉE DE DROITE	RIGHT RABBET	RECHTER ANSCHLAG	TOPE DERECHO	
4	3207194	BATTUTA SINISTRA	BUTÉE DE GAUCHE	LEFT RABBET	LINKER ANSCHLAG	TOPE IZQUIERDO	
5	2223924	DADO	ECROU	NUT	MUTTER	TUERCA	AUTOBL. M8
6	2224204	RONDELLA	RONDELLE	WASHER	UNTERLEGSCHIEBE	ARANDELA	6593 8x24
7	3210641	CAVALLETTO ETERNO	CHEVALET EXTÉRIEUR	EXTERNAL TRESTLE ELEMENT	AUBERES GESTEL	CABALETTE EXTERNO	
8	1222030	VITE	VIS	BOLT	SCHRAUBE	TORNILLO	5737 8x60
9	3210646	RIVESTIMENTO GOMMA	REVEITEMENT IN CAOUTCHOUC	RUBBER COATING	GUMMI BEKLEIDUNG	GOMA REVESTIMIENTO	

TAV. 5



TAV.5 SUPPORTO 45° - SUPPORT 45° - 45° SUPPORT - SOPORTE 45°- UNTERLAGE45°: COD.1187623

Rif.	Cod.	I	F	GB	D	E	Note
1	2284859	POMELLO	POIGNEE	KNOB	KNOPS	POMO	