



INSTRUCTION MANUAL



CARROT BITS PROCESSOR

PCE



METALÚRGICA SIEMSEN LTDA.

Rua Anita Garibaldi, nº 262 – Bairro: São Luiz – CEP: 88351-410
Brusque – Santa Catarina – Brasil
Fone: +55 47 3255 2000 – Fax: +55 47 3255 2020
www.siemsen.com.br - comercial@siemsen.com.br



E-mail: at@siemsen.com.br

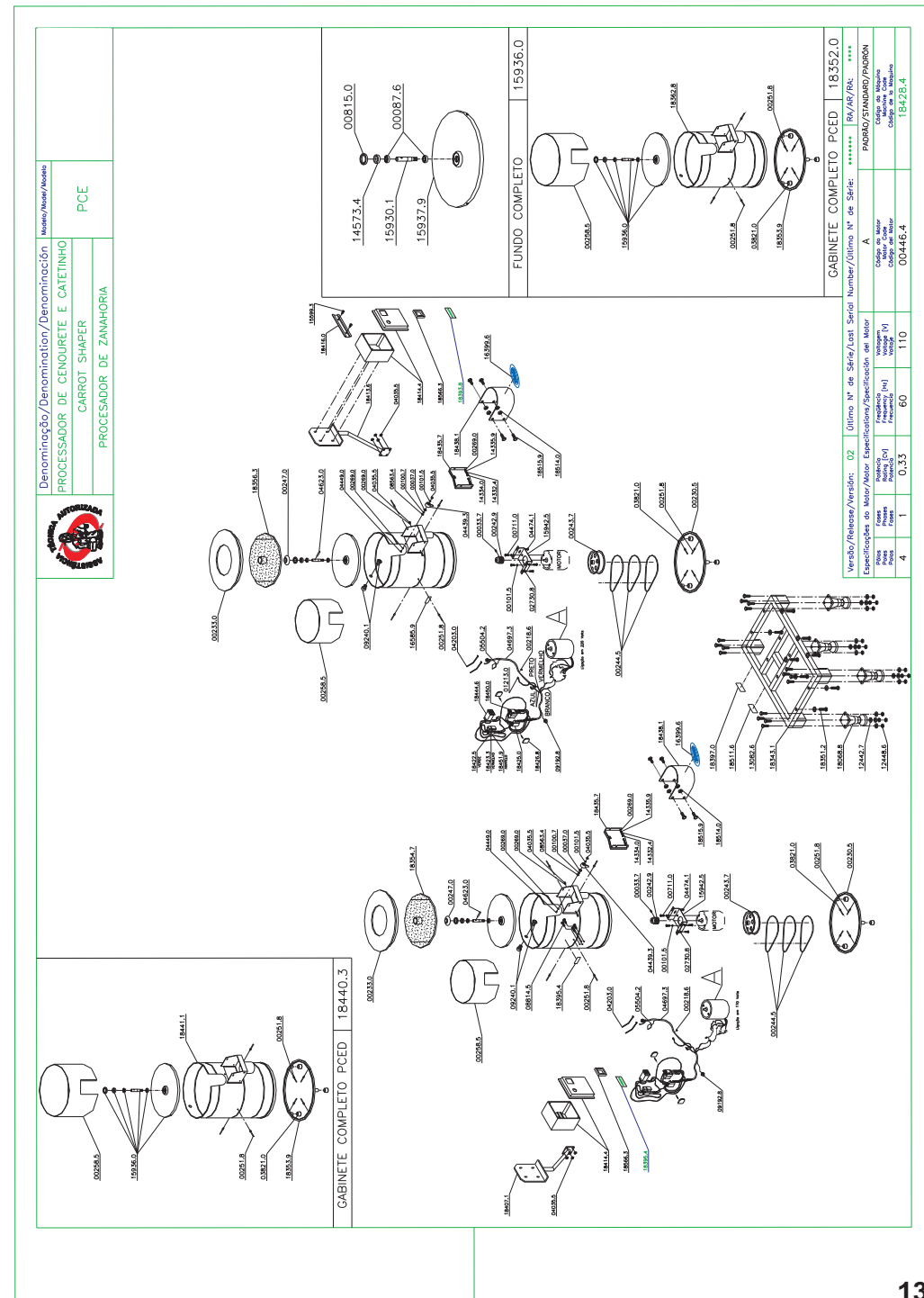
- ALÉM DESTAS MÁQUINAS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.
DEVIDO À CONSTATANTE EVOLUÇÃO DOS NOSSOS PRODUTOS, AS INFORMAÇÕES AQUI CONTIDAS PODEM SER MODIFICADAS SEM AVISO PRÉVIO.

26330-3 -JUNHO/2006

SUMMARY

1.	Introduction	01
1.1	Safety	01
1.2	Main Components	01
1.3	Technical Characteristics	02
2.	Installation and Pre Operation	03
2.1	Installation	03
2.2	Pre operation	03
3.	Operation	04
3.1	Instructions on how to operate	04
3.3	Cleaning	04
4.	General Safety Practices	05
4.1	Basic Operation Procedures	05
4.2	Safety Procedures and Notes before switching the machine on	06
4.3	Routine Inspection	06
4.4	Operation	07
4.5	After finishing the work	07
4.6	Maintenance	07
4.7	Advices	07
5.	Analysis and Problem Solving	08
5.1	Problems, Cause and Solutions	08
5.2	Electric Diagram Mod. PCE 220/110V	09
5.3	Spare Parts Mod. PCE 220V	10
5.4	Exploded Drawing Mod. PCE 220V	11
5.5	Spare Parts Mod PCE 110V	12
5.6	Exploded Drawing Mod. PCE 110V	13

5.6 ExpolDED Drawing Mod. PCE 110V



5.5 Spare Parts Mod. PCE 110V

Código	Descrição do Componente	U.M.
00033-7	PFS ASC UNC1/4"x1/4" F	CE
00037-0	PCA SEX UNC 1/4" ZB	CE
00087-6	ROLAMENTO 6004 Z DIN 625	PC
00100-7	ARR L 1/4"x1,6 ZB	CE
00101-5	ARR L 3/8" ZB	CE
00218-6	PASSADOR FIO MOLDE 092231	PC
00230-5	ARO BASE DB10/10E/DC08	PC
00233-0	TAMPA GABINETE DB10/E/DC8	PC
00242-9	POLIA MOTORA DB-10/DC-08	PC
00243-7	POLIA MOVIDA DB-10/DC-08	PC
00244-5	CORREIA Z 625	PC
00271.2	ARO DA BASE - TSP-02	PC
00247-0	FLANGE BOR.MOLDE 085286	PC
00251-8	REBITE PRESSAO AD-665-S	MI
00258-5	REVEST.BOR.1300x265x6mm	PC
00269-0	ARR L 1/4" INOX	CE
00446-4	MOTOR 0,33CV 60Hz W	PC
00711-0	PFS SEX UNC3/8"x7/8" RTZB	CE
00815-0	RETENTOR 1746B*(8548-W)	PC
01213-0	TERM. PRE-ISOL.EF-4228	MI
02730-8	ARR.L.A8,4 DIN 125 ZB	CE
03821-0	PONT.EXT.RED.7/8" FLEXIV.	MI
04035-5	PCAACAB UNC 1/4" LATAO	CE
04203-0	ABRACADEIRA T-18R-PEQUENA	CE
04439-3	FECHO	PC
04449-0	PFS FCH UNC1/4x1.1/2 RTZB	CE
04474-1	PFS M8x20 DIN 933 ZB	PC
04697-3	CB.3x1,0mm2C/PG90 2PR1FTF	PC
05504-2	ETIQ.ATENCAO 110/220/380V	PC
08563-4	ARR. 10x28x1,5mm ZINC.	CE
08814-5	PFS FCH UNC1/4"x1/2" RTIn	CE
02949.1	TERM. PRE-ISOL.NA-4503	MI
03074.0	ARR.L.A4,3 DIN 125 ZB	CE
03283.2	TERM. PRE-ISOL.AN-2434	MI
03988.8	PFS M6x16 DIN 933 ZB	CE
04203.0	ABRACADEIRA T-18R-PEQUENA	CE
04569.1	PFS M6x12 DIN 84 ZB	CE
04697.3	CB.3x0,75mm2C/PG90 2PR1FTF	PC
05504.2	ETIQ.ATENCAO 110/220/380V	PC
08563-4	ARR. 10x28x1,5mm ZINC.	CE
08814-5	PFS FCH UNC1/4"x1/2" RTIn	CE
09192-8	FIXA CABO PRETO FC PG 7	PC
09240-1	CONJUNTO NIPEL/REDUCAO	PC
12442-7	ARR.L.A6,4 DIN 125 INOX	CE
12448.6	PCA M6 DIN 934 INOX	CE
13082-6	PFS M6x20 DIN 933 INOX	CE
14332.4	DISTANCIADOR	PC
14334-0	PFS SEX UNC1/4"x1" RTIn	CE
14335-9	PCA SEX UNC 1/4" INOX	CE
14573-4	ANEL 42x1,75 DIN 472	CE
15599-3	PFS B.3,5x9,5 DIN 7971 In	CE
15930-1	EIXO CENTRAL	PC
15936-0	FUNDO COMPLETO	PC
15937-9	FUNDO DP-10/DCP-08	PC
15942-5	SUPORTE MOTOR (CHAPA)	PC
16399-6	LOGOTIPO ETERNA	DE
16585-9	ETIQ.IDENTIF.MOTOR/RESIST	PC
18068-8	PE 7/8"W ANTI-DERRAPANTE	PC
18343-1	CS SUPORTE	PC
18351-2	PFS M8x40 DIN 933 INOX	CE
18352-0	GABINETE COMPLETO PCED	PC
18353-9	ARO BASE PCED/PCEA	PC
18354-7	DISCO ABRASIVO PCED G60	PC
18356-3	DISCO ABRASIVO PCEA G100	PC
18362-8	CS GABINETE PCED	PC
18393-8	ETIQ.ACABAMENTO MOD.PCEA	PC
18395-4	ETIQ.DESBASTE MOD.PCED	PC
18397-0	ETIQ.PROC.CEN.CAT. - PCE	DE

Código	Descrição do Componente	U.M.
18407-1	CS SUPORTE ESQUERDO CAIXA	PC
18413-6	CS SUPORTE DIREITO CAIXA	PC
18414-4	CAIXA DE LIGACAO USINADA	PC
18416-0	REGUA DE BORNES	PC
18422-5	BLOCO CONTATO NA LM2TC10	PC
18423-3	BLOCO CONTATO NF LM2TC01	PC
18425-0	BORNE LIG.P/FIO 2,5 CBD2	PC
18426-8	PLACA EXTREMIDADE CB2/PT	PC
18435-7	PORTA C/BORRACHA PCED/PCEA	PC
18438-1	ANTEPARO	PC
18440-3	GABINETE COMPLETO PCEA	PC
18441-1	CS GABINETE PCEA	PC
18444-6	TEMPOR.TEI-01MP 180s 110V	PC
18450-0	CONT.CW07.10 110V 50/60Hz	PC
18451-9	BLOCO LUM.C/LP.LM2TEL400	PC
18511-6	ETIQ.IDENTIF.S/MOTOR/MAN.	PC
18514-0	PCA M6 DIN 1587 LATAO NIQ	CE
18515-9	PFS M6x10 DIN 84 INOX	CE
18566-3	DISTANCIADOR TEMPORIZADOR	PC

1. Introduction

1.1 Safety

When not properly used the PCE model Carrot Bits Processors are potentially dangerous machines. Servicing, cleaning or any other operation shall be made by trained people. Plug has to be off outlet during any of these operations. To avoid accidents follow the below instructions :

1.1.1 Unplug the machine when you need to remove any removable part during cleaning, servicing or any other operation.

1.1.2 Never make use of any tool or instrument that is not originally part of the machine during any operation. Be sure that removable parts are properly installed in their correct position.

1.1.3 Never touch the Abrasive Disc (Pict. 01) , when the machine is on movement.

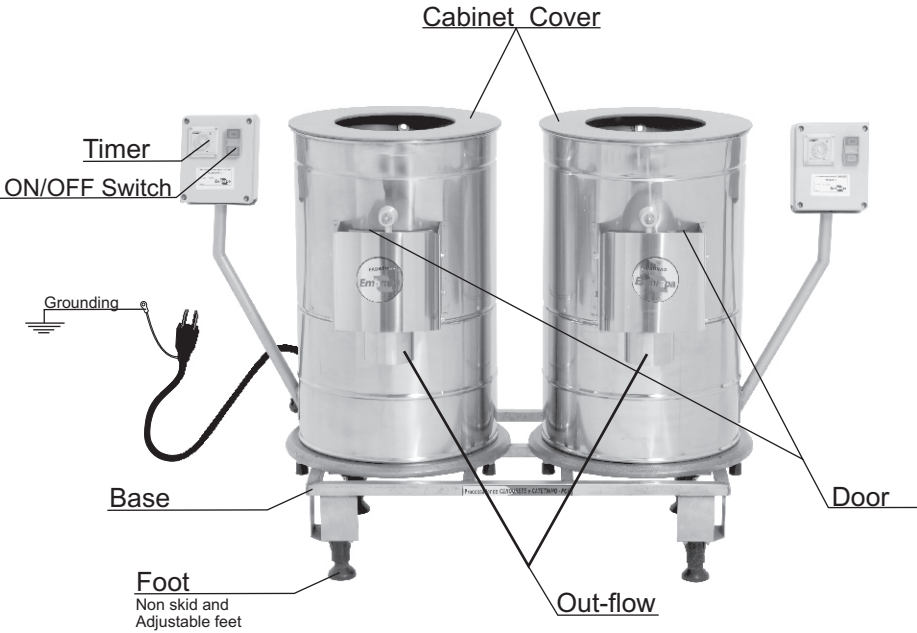
1.1.4 Keep hands off turning parts.

1.1.5 When replacing the Abrasive Disc (Pict. 01) ,to avoid damages to the machine , be sure the Disc is perfectly fitted on the Central Shaft (Pict.02) .



1.2 Main Components:

All components of this machine were designed and made to its proper function according to the tests patterns and experience of Siemens.



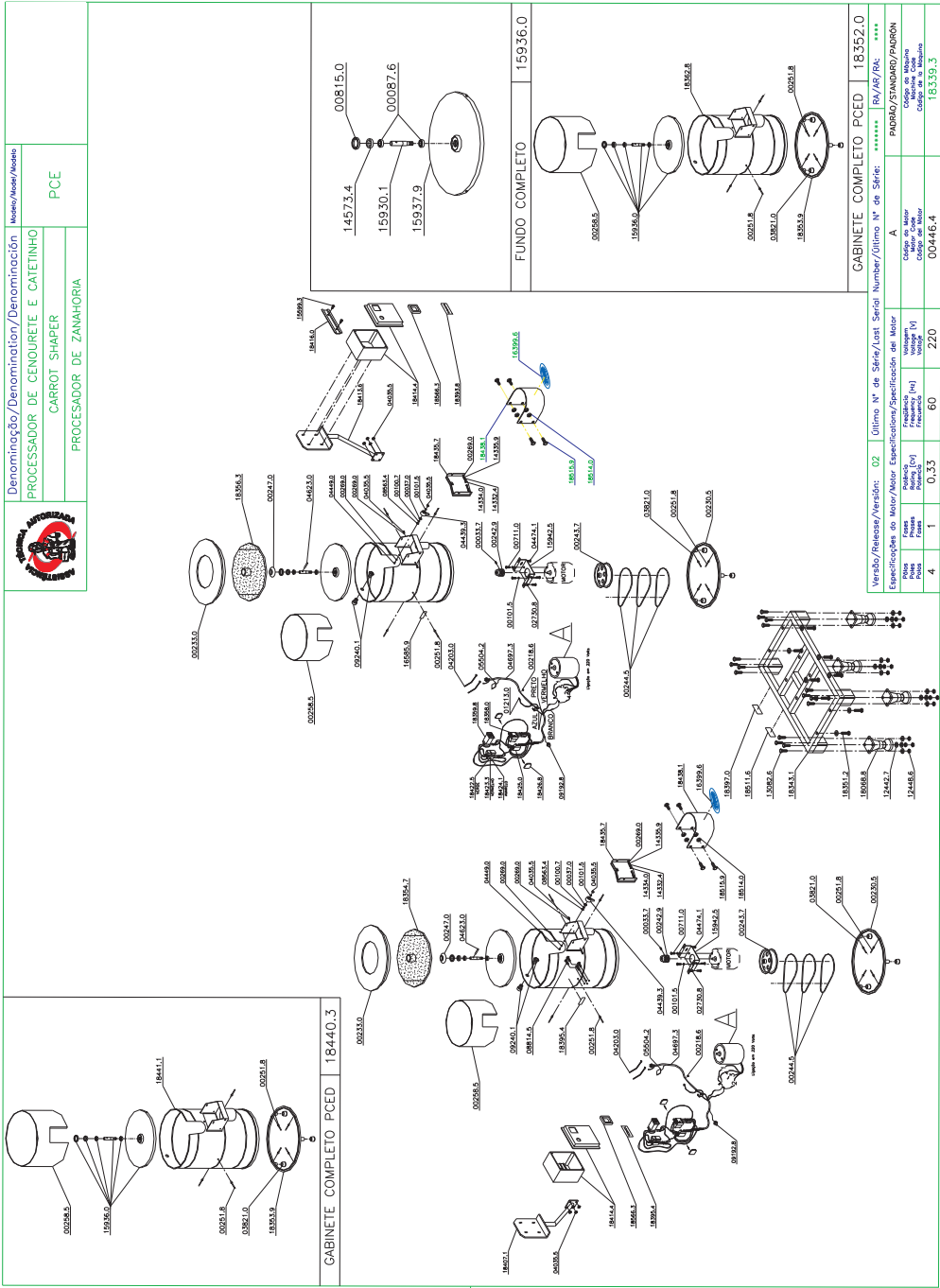
1.3 Technical Characteristics

Table 01

Characteristics	Unit	PCE
Average Production	[kg/h]	até 35
Voltage	[V]	110 ou 220(**)
Frequency	[Hz]	50 ou 60 (*)
Power Rating	HP	2 x 0,33
Consumption	[kW/h]	2 x 0,26
Height	[mm]	980
Width	[mm]	1500
Depth	[mm]	600
Net Weight	[kg]	59
Gross Weight	[kg]	69

(*) The frequency will be only one , the rated motor frequency .
(**) The voltage will be only one , according to the voltage informed by the manufacturer .

5.4 Exploded Drawing Mod. PCE 220V



5.3 SPARE parts Mod. PCE 220V

Código	Descrição do Componente	U.M.
00033-7	PFS ASC UNC1/4"x1/4" F	CE
00037-0	PCA SEX UNC 1/4" ZB	CE
00087-6	ROLAMENTO 6004 Z DIN 625	PC
00100-7	ARR L 1/4"x1,6 ZB	CE
00101-5	ARR L 3/8" ZB	CE
00218-6	PASSADOR FIO MOLDE 092231	PC
00230-5	ARO BASE DB10/10E/DC08	PC
00233-0	TAMPA GABINETE DB10/E/DC8	PC
00242-9	POLIA MOTORA DB-10/DC-08	PC
00243-7	POLIA MOVIDA DB-10/DC-08	PC
00244-5	CORREIA Z 625	PC
04623-0	PINO EIXO CENTRAL C/ZINC.	PC
00247-0	FLANGE BOR.MOLDE 085286	PC
00251-8	REBITE PRESSAO AD-665-S	MI
00258-5	REVEST.BOR.1300x265x6mm	PC
00269-0	ARR L 1/4" INOX	CE
00446-4	MOTOR 0,33CV 60Hz W	PC
00711-0	PFS SEX UNC3/8"x7/8" RTZB	CE
00815-0	RETENTOR 1746B*(8548-W)	PC
01213-0	TERM. PRE-ISOL.EF-4228	MI
02730-8	ARR.L.A8,4 DIN 125 ZB	CE
03821-0	PONT.EXT.RED.7/8" FLEXIV.	MI
04035-5	PCAACAB UNC 1/4" LATAO	CE
04203-0	ABRACADEIRA T-18R-PEQUENA	CE
04439-3	FECHO	PC
04449-0	PFS FCH UNC1/4x1.1/2 RTZB	CE
04474-1	PFS M8x20 DIN 933 ZB	PC
04697-3	CB.3x1,0mm2C/PG90 2PR1FTF	PC
05504-2	ETIQ.ATENCAO 110/220/380V	PC
08563-4	ARR. 10x28x1,5mm ZINC.	CE
08814-5	PFS FCH UNC1/4"x1/2" RTIn	CE
02949.1	TERM. PRE-ISOL.NA-4503	MI
03074.0	ARR.L.A4,3 DIN 125 ZB	CE
03283.2	TERM. PRE-ISOL.AN-2434	MI
03988.8	PFS M6x16 DIN 933 ZB	CE
04203.0	ABRACADEIRA T-18R-PEQUENA	CE
04569.1	PFS M6x12 DIN 84 ZB	CE
04697.3	CB.3x0,75mm2C/PG90 2PR1FTF	PC
05504.2	ETIQ.ATENCAO 110/220/380V	PC
08563-4	ARR. 10x28x1,5mm ZINC.	CE
08814-5	PFS FCH UNC1/4"x1/2" RTIn	CE
09192-8	FIXA CABO PRETO FC PG 7	PC
09240-1	CONJUNTO NIPEL/REDUCAO	PC
12442-7	ARR.L.A6,4 DIN 125 INOX	CE
12448.6	PCA M6 DIN 934 INOX	CE
13082-6	PFS M6x20 DIN 933 INOX	CE
14332.4	DISTANCIADOR	PC
14334-0	PFS SEX UNC1/4"x1" RTIn	CE
14335-9	PCA SEX UNC 1/4" INOX	CE
14573-4	ANEL 42x1,75 DIN 472	CE
15599-3	PFS B.3,5x9,5 DIN 7971 In	CE
12426-5	PFS M6X16 DIN 933 INOX	PC
18355-5	OXIDO DE ALUMÍNIO Nº 100	PC
18358-0	CONT. CW07.10 220V 50/60HZ	PC
18359-8	TEMPOR. TEI-01MP 180s 220V	PC
16399-6	LOGOTIPO ETERNA	DE
16585-9	ETIQ.IDENTIF.MOTOR/RESIST	PC
18068-8	PE 7/8"W ANTI-DERRAPANTE	PC
18343-1	CS SUPORTE	PC
18351-2	PFS M8x40 DIN 933 INOX	CE
18352-0	GABINETE COMPLETO PCED	PC
18353-9	ARO BASE PCED/PCEA	PC
18354-7	DISCO ABRASIVO PCED G60	PC
18356-3	DISCO ABRASIVO PCEA G100	PC
18362-8	CS GABINETE PCED	PC
18361-0	DOSADOR COMPLETO PCED/A	PC
18395-4	ETIQ.DESBASTE MOD.PCED	PC
18397-0	ETIQ.PROC.CEN.CAT. - PCE	DE

Código	Descrição do Componente	U.M.
18407-1	CS SUPORTE ESQUERDO CAIXA	PC
18413-6	CS SUPORTE DIREITO CAIXA	PC
18414-4	CAIXA DE LIGACAO USINADA	PC
18367-9	TAMPA GABINETE PCED/PCEA	PC
18422-5	BLOCO CONTATO NA LM2TC10	PC
18423-3	BLOCO CONTATO NF LM2TC01	PC
18425-0	BORNE LIG.P/FIO 2,5 CBD2	PC
18426-8	PLACA EXTREMIDADE CB2/PT	PC
18435-7	PORTA C/BORRACHA PCED/PCEA	PC
18438-1	ANTEPARO	PC
18440-3	GABINETE COMPLETO PCEA	PC
18441-1	CS GABINETE PCEA	PC
18402-0	CS CAIXA DO DOSADOR	PC
18406-3	CS TAMPA DE DESCARGA	PC
18415-2	MOLA DO DOSADOR DIAM 1,8	PC
18511-6	ETIQ.IDENTIF.S/MOTOR/MAN.	PC
18514-0	PCA M6 DIN 1587 LATAO NIQ	CE
18416-0	RÉGUA DE BORNES	PC
18424-1	BLOCO LUM. C/LP.LM2TZL230	PC

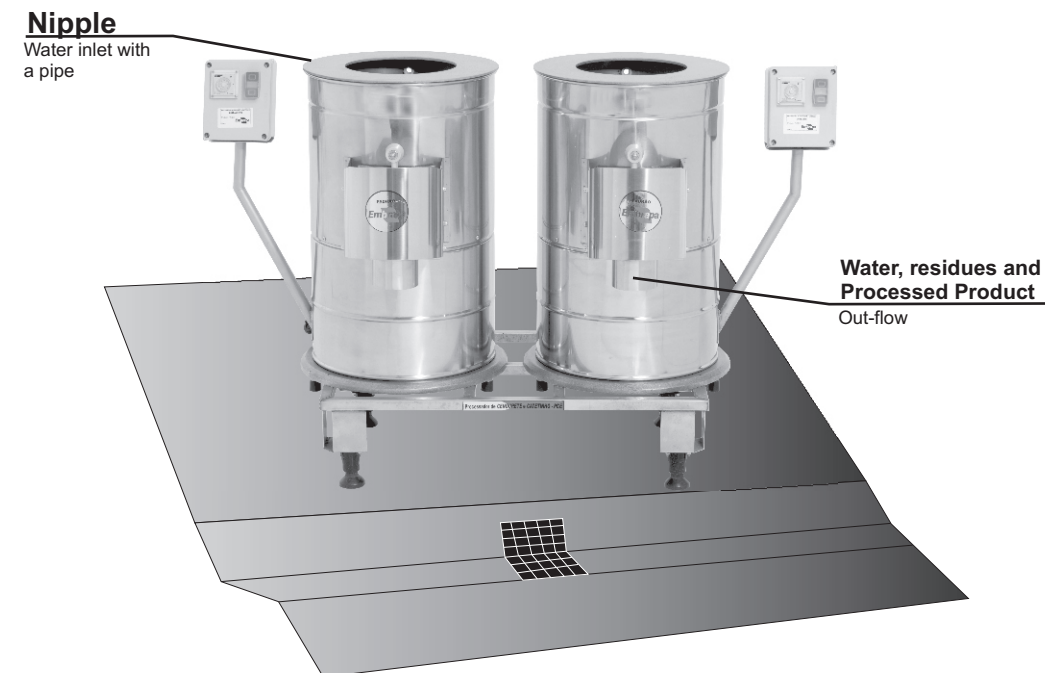
2. Installation and Pre Operation

2.1 Installation

The Carrot Bits Processors have to be installed onto a leveled and stable surface.

Before plugging in the machine check if power supply voltage and machine voltage are the same, 110 V or 220 V . Ground the machine properly, the plug has two pins and a grounding wire ,the three of them shall be properly connected.

It is recommended to install the machine close to a water sunk . It will also be necessary to provide a clean water flow directly on the product through the nipples placed on the back side of the machine cabinets , or have a faucet and with a pipe throw water on the product .



2.2Pre Operation

IMPORTANT

Before to start the machine be sure the Abrasive Disc (Pict.01) is perfectly fitted on the Central Shaft Pin (Pict.02) .

The machine shall be perfectly firm . Install the water inlet and outlet .

3. Operation

3.1 Instructions on how to operate

IMPORTANT

Under no circumstances put your hand on the Abrasive Disc while it is running .

Be sure The Cabinet Covers (Pict 03) are suitably fitted on the Cabinet top . To start operation , save the product into a bucket , adjust the Timer for the desired time , each scale division means 9 (nine) seconds. Then switch the machine ON (Pict.03) and immediately , drop the product into the cabinet .

Water shall be flowed directly on the product .

When the product to be processed is too rough , it is possible the watch through the cover opening and see when the product has reached the desired finishing . To remove the finished product from the Cabinet , keep the machine running and very carefully , open the Cabinet Door (Pict.03) , the product will be expelled .

3.2 Cleaning

To proceed to clean the machine , it is possible to have the machine running empty, and let it work for some minutes , adding an abundant water flow .

The Abrasive Disc (Pict.01) shall also be clean , therefore proceed as follows :

1- Switch the machine OFF , and for more safety the plug has to be out of its socket . Wait the Abrasive Disc (Pict.01) to be absolutely still .

2- To withdraw the Abrasive Disc (Pict.01) , lift the Cabinet Cover (Pict.03) and then lift the Abrasive Disc (Pict.01) .

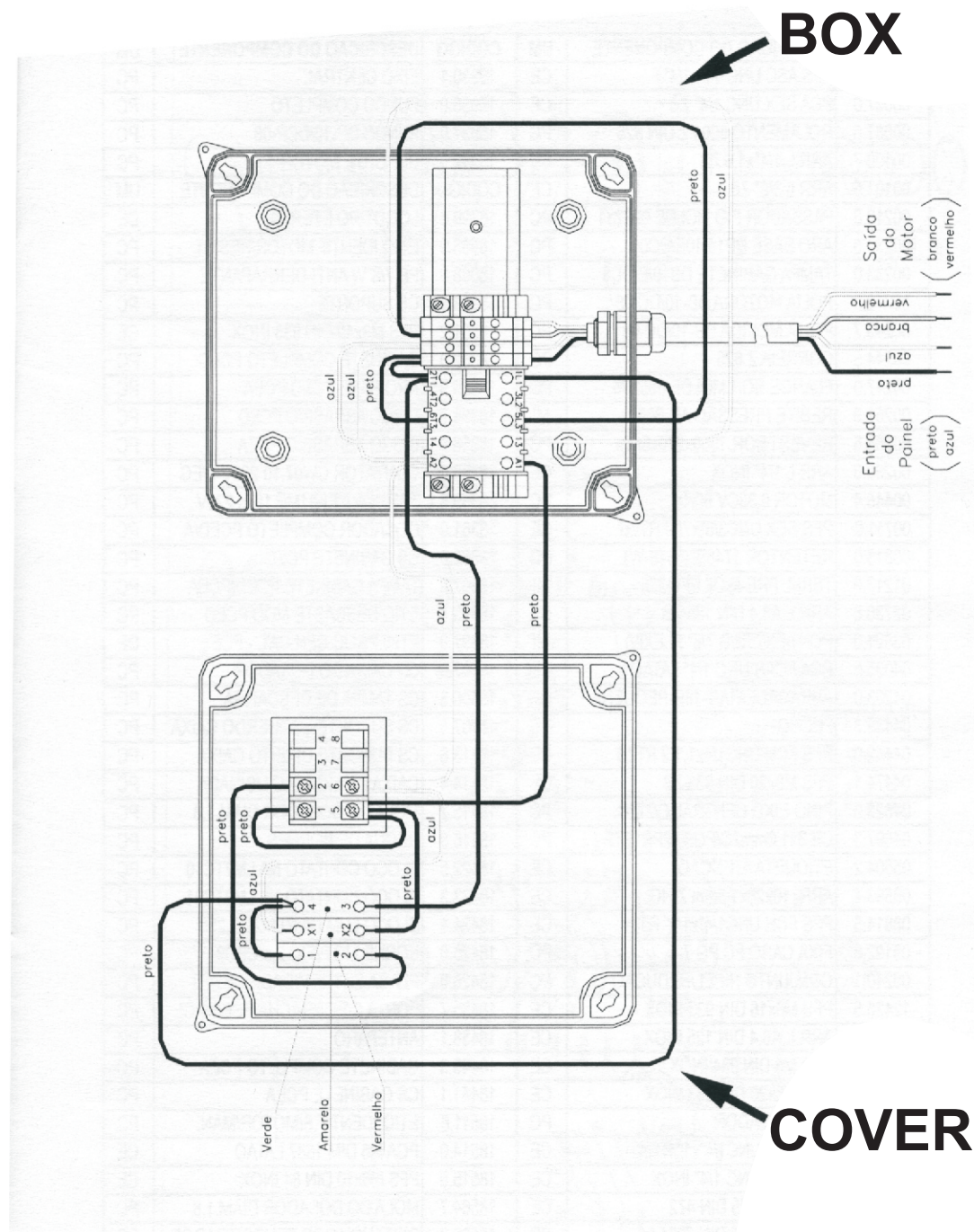
3- Wash the Abrasive Disc (Pict.01), and the Cabinet inside with water and neutral soap , then rinse them carefully .

4- To replace the Disc (Pict.01) follow the inverse item 2 procedure . The Disc must be placed with care to be securely fitted onto the Central Shaft Pin .

IMPORTANT

Take good care and use properly and safely the machine , doing so will only bring benefits to you .

5.2 Electric Diagram Mod. PCE 220/110V



5. Analysis and Problems Solving

5.1 Problem, causes and solutions

The Carrot Bits Processors were designed to operate with the need of minimum maintenance but the natural wearing caused by long use of the equipment may occasionally cause some malfunctions.

If such problem occurs with your mixer refer to Table 02 in which the most common situations are listed with recommended solutions..

Table 02

Problems	Causes	Solutions
* The machine does not start	* Electric Energy shortage * Internal or external electric circuit problems	* Check electric energy supply * Call the technical assistance
* Burning odor or smoke	* Problems with internal or external electric circuits	* Call the technical assistance
* The machine starts , but when the products is dropped on the Disc , the Disc stops or turns slowly	* Belts sliding * Electric motor problems	* Call the technical assistance * Call the technical assistance
* Abnormal noises	* Abrasive Disc is not well placed * Damaged bearings	* Place the Abrasive Disc correctly on Central Shaft Pin * Call the technical assistance
* Water leaks through the bottom	* Damaged retainer	* Call the technical assistance

4. General Safety Practices

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance. The machine has to be delivered only in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. **READ THIS MANUAL WITH ATTENTION.**

4.1 Basic Operation Practices

4.1.1 Dangerous parts
Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical chocks or even be fatal.
Never touch manual commands such as switches, buttons, keys and knobs with your hands wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a fatal

4.1.2 Warnings
The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be used when necessary. Before any kind of maintenance, physically remove the plug from its socket .
Provide space for a comfortable operation thus avoiding accidents.
Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.
Before to give any manual command (switch, buttons, turn keys or lever) be sure the command is the correct one . Check this manual for further details if necessary.
Never use a manual command (switch , buttons , lever) unadvisedly.
If any work is to be made by two or more persons, coordination signs will have to be given for each operation step . Every step of the operation shall be taken only if a sign has been made and responded.

4.1.3 Advices
In case of power shortage, immediately turn the machine OFF.
Use recommended or equivalent lubricants, oils or greases .
Avoid mechanical chocks as they may cause failures or malfunction.
Avoid penetration of water, dirt or dust into mechanical or electrical components of the machine.
DO NOT MODIFY original characteristics of the machine.
DO NOT REMOVE, TEAR OFF OR MACULATE any safety or identification labels sticked on the machine. If any labels has been removed or is no longer legible contact your nearest dealer for replacement.

4.2 Safety Procedures and Notes Before Turning Machine ON

IMPORTANT

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to be familiar with the set and that you have well understood all information contained in this manual. If you have any question contact your supervisor or your nearest Dealer

4.2.1 Danger

An electric cable or electric wire with damaged insulation could cause electrical chocks as well as electrical leak. Before use check conditions of all wires and cables.

4.2.2 Advices

Be sure ALL INSTRUCTIONS in this manual have been thoroughly understood. Every function and operational procedure have to be very clear to the operator. Contact your nearest Dealer for further questions.

Any manual command (switch, button or lever) shall be given only after to be sure it is the correct one .

4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine. Cables touching the floor or close to the machine need to be protected against short circuits.

Oil reservoirs if any have to be full up to the required level as indicated. Check level and add oil if necessary.

4.3 Routine Inspection

4.3.1 Advice

When checking the tension of the belts or chains, DO NOT introduce your fingers between the belts and the pulleys and nor between the chain and the gears.

4.3.2 Precautions

Check if motors and sliding or turning parts of the machine produce abnormal noises.

Check the tension of the belts and chains and replace the set when belt or chain show signs of being worn out.

When checking tensions of belts or chain DO NOT introduce your fingers between belts and pulleys , nor between the chains and gears.

Check protections and safety devices to make sure they are working properly.

4.4 Operation

4.4.1 Advices

Be sure your hair is not loose in order to avoid getting caught by turning parts which could lead to a serious accident. Tie your hair up well and/or cover your head with a scarf.

The operation performed by not trained or skilled personnel shall be forbidden. Never touch turning parts with your hands or in any other way. NEVER operate machine without all original safety devices under perfect conditions.

4.5 After Finishing The Work

4.5.1 Precautions

Always TURN THE MACHINE OFF by removing the plug from the socket before cleaning the machine. Never clean the machine unless it has come to a complete stop. Put all components back to their functional positions before turning it ON again. Check level of oil, if any . DO NOT place your fingers in between belts and pulleys nor chains and gears.

4.6 Maintenance

4.6.1 Danger

Any maintenance with the machine in working situation is dangerous. TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

IMPORTANT

Pull the plug off its socket when any emergency arises .

4.7 Advice

Electrical or mechanical maintenance has to be undertaken by qualified personal.

Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working .