



SCORPIO-02 A
AUTOMATIC PVC CORNER CLEANING MACHINE
USER'S MANUAL



CONTENTS	Page
1. General Information	3
1.1. Introduction	3
1.2. Manufacturer	3
2. Machine's Description and Purpose of Use	3
2.1. Machine's description	3
2.2. Technical features	5
2.3. Overall dimensions	6
2.4. Part lists and technical drawings	7
3. Safety	9
3.1. Safety information	9
3.2. Accident prevention	9
3.3. General safety information	10
4. Transport of the Machine	12
5. Installation of the Machine	12
6. Machine's Safety Information	13
7. Operation	13
7.1. Changing the cutter group	14
7.2. Adjusting the machine's air pressure	14
8. Maintenance	15
8.1. Periodic Checks	15
8.2. Maintenance at the end of working day	15
9. Troubleshooting Guide	16
10. Electric / Pneumatic Components	17
10.1. Electric components	17
10.2. Pneumatic components	17



1. GENERAL INFORMATION

1.1. INTRODUCTION

The user's manual given by the manufacturer contains necessary information about the machine parts. Each machine operator should read these instructions carefully, and the machine should be operated after fully understanding them.

Safe and efficient use of the machine for long term depends on understanding and following the instructions contained in this manual. The technical drawings and details contained in this manual constitute a guide for the operator.

1.2. DISTRIBUTOR

ATech Machine, Inc.
10752-A Tucker Street – Beltsville, MD 20705 USA
Phone: +1-301-595-1816 Fax: +1-301-560-6627
Website: www.ATechMachinery.com E-mail: info@ATechMachinery.com

In case of any technical problem please contact your nearest ATECH dealer, or ATECH head office through the above mentioned phone, fax or e-mail address.

Technical labels with the model description of the machine are fixed onto the front side of each machine.

The machine's serial number and manufacturing year are stipulated on the technical label.

2. MACHINE'S DESCRIPTION AND TECHNICAL FEATURES

2.1 MACHINE'S DESCRIPTION

The machine has been designed for the corner cleaning of vinyl (PVC) profiles after the welding operation.

- Adjustable to different PVC profile types.
- Equipped with centralizing guide ensuring correct placement of profiles onto the set square.
- Stops automatically after the corner cleaning operation.
- Serial cutter replacement system.



Please mention the below mentioned data in all your correspondence regarding the machine with the manufacturer and/or your ATECH dealer.

- *Machine model
- *Machine's serial number
- *Voltage and frequency
- *Name of dealer where machine was purchased
- *Date of purchase
- *Description of the machine fault
- *Average daily operation period

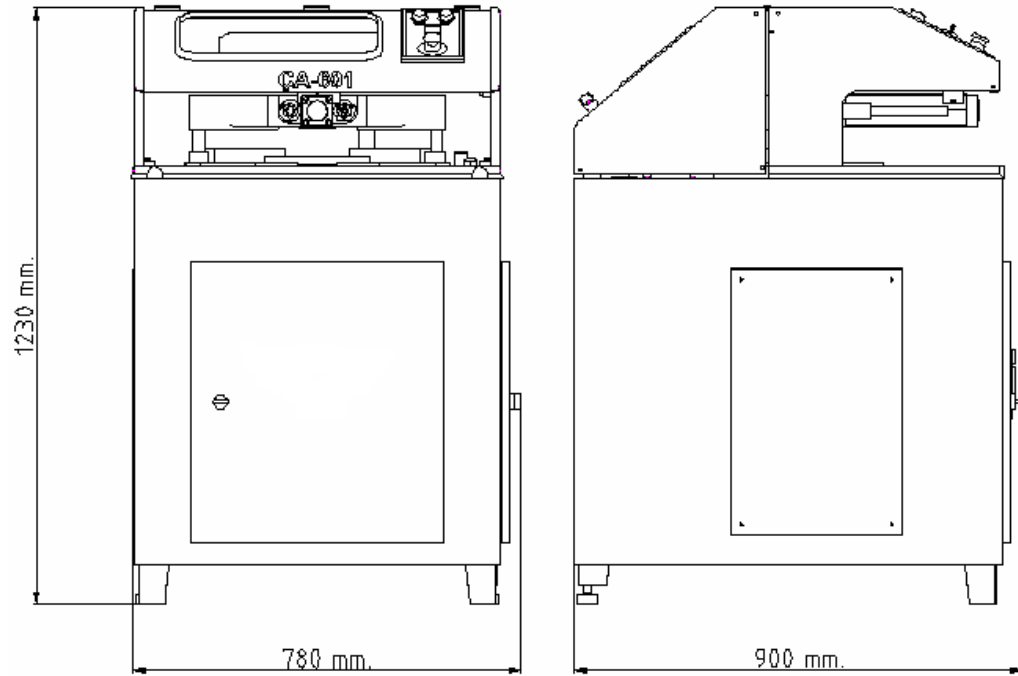


2.2 TECHNICAL FEATURES

Technical Features (American)							
SCORPIO-02 A 2 cutter stacks	1.2 kW 440V 60Hz	d=1 $\frac{1}{4}$ " D=9 $\frac{1}{8}$ "	3000 rpm	90-120 psi	2 CFM	31x36x49"	440 lb
SCORPIO-02 A 4 cutter stacks	1.2 kW x 2 440V 60Hz	d=1 $\frac{1}{4}$ " D=9 $\frac{1}{8}$ "	3000 rpm	90-120 psi	2 CFM	33x41x56"	583 lb
SCORPIO-02 A 6 cutter stacks	1.2 kW x 2 440V 60Hz	d=1 $\frac{1}{4}$ " D=9 $\frac{1}{8}$ "	3000 rpm	90-120 psi	2 CFM	33x41x56"	594 lb

Technical Features (Metric)							
SCORPIO-02 A 2 cutter stacks	1200 W 400V 50Hz	d=32 mm D=Max.230	3000 rpm	6-8 Bar	60 1/min	78x90x123 cm	200 kg
SCORPIO-02 A 4 cutter stacks	1200W x 2 400V 50Hz	d=32 mm D=Max.230	3000 rpm	6-8 Bar	60 1/min	82x102x140 cm	265 kg
SCORPIO-02 A 6 cutter stacks	1200 W x 2 400V 50 Hz	d=32 mm D=Max.230	3000 rpm	6-8 Bar	60 1/min	82x102x140 cm	270 kg

2.3 OVERALL DIMENSIONS



2.4 PART LISTS AND TECHNICAL DRAWINGS

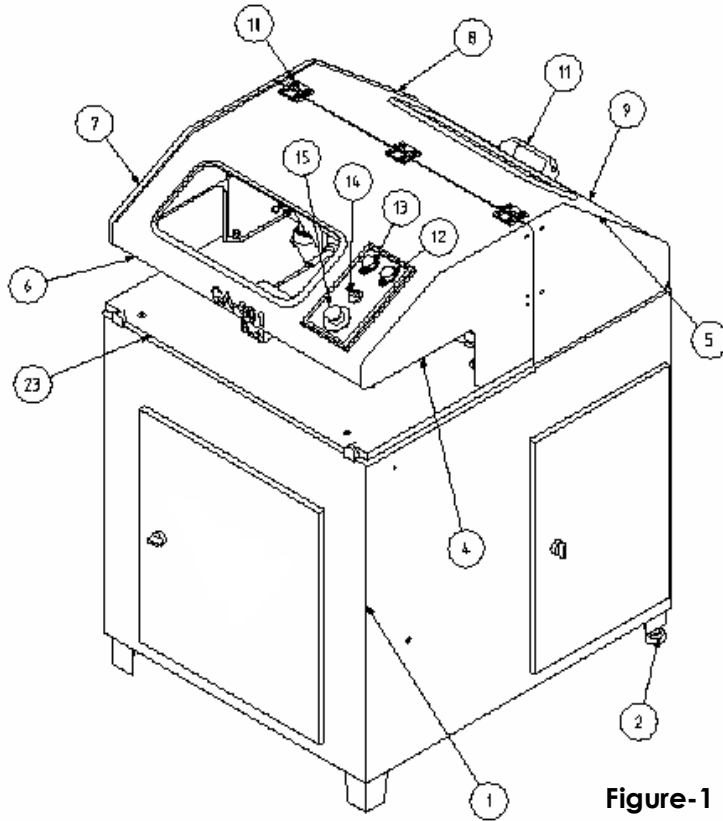


Figure-1

NO	STOCK CODE	PART NAME	QTY
1	211-003	FRAME	1
2	141-050	M16x55 FOOT ADJUSTMENT BOLT	2
4	111-023	RIGHT LATERAL FRONT COVER	1
5	111-022	RIGHT LATERAL BACK COVER	1
6	211-004	UPPER COVER	1
7	111-025	LEFT LATERAL FRONT COVER	1
8	111-024	LEFT LATERAL BACK COVER	1
9	211-002	BACK SHEET COVER	1
10	179-003	HINGE	1
11	222-010	COVER HANDLE	1
12	165-047	STOP BUTTON	1
13	165-046	START BUTTON	1
14	165-042	POSITION SELECTION BUTTON	1
15	165-008	EMERGENCY STOP BUTTON	1

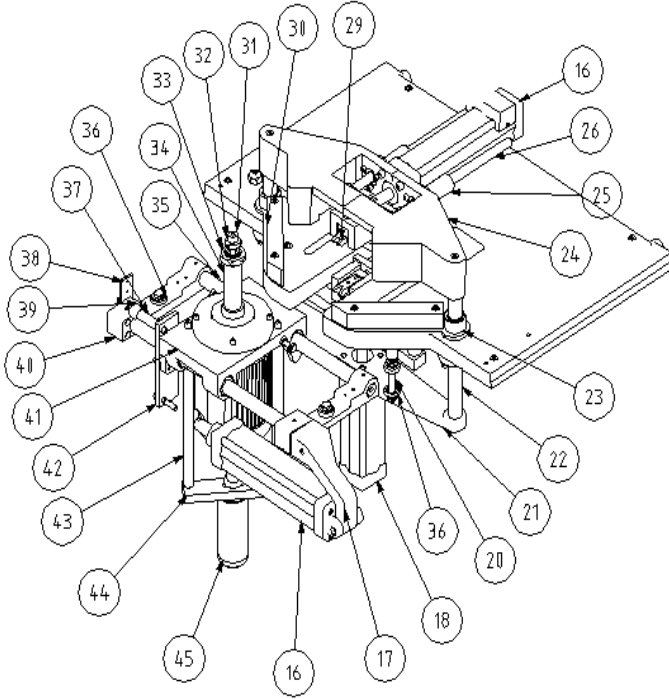


Figure-2

NO	STOCK CODE	PART NAME	QTY
16	242-024	PISTON PNS Y 50X85	3
17	111-020	MOTOR PISTON CONNECTION	1
18	242-017	PISTON PAG Y 50X90	1
20	141-047	TABLE ADJUSTMENT DOWEL	2
21	111-036	CLAMP PISTON CONNECT.	1
22	143-002	CLAMP COLUMN SHAFT	2
23	111-017	FOOT	1
24	111-018	CLAMP	1
25	112-003	UPPER SCRAPER SHAFT HOUSING	2
26	143-005	SCRAPER GUIDE SHAFT	3
29	550-016	SCRAPING CUTTER GROUP	2
30	111-153	SEDT SQUARE	2
31	141-022	CUTTER TIGHTENING BUSHE	1
32	141-023	CUTTER TIGHTENING WASHER	1
33	141-027	CUTTER TIGHTENING NUT	1
34	141-016	MILLING CUTTER MANDREL	1
35	144-001	MOVEM. HOUSING SHAFT	2
36	141-035	WASHER 30X10X9	6
37	141-025	SWITCH SIGNAL CONNECT. PART	1
38	112-004	MOTOR SWITCH CONNECT. THIN PLATE	1
39	141-026	SWİTÇ SİNYAL PARÇASI	2
40	111-019	HAREKET YATAĞI MİL BAĞL.	2
41	111-102	HAREKET YATAĞI	1
42	145-004	HAREKET YATAĞI BAĞL.LAM.	1
43	141-015	PISTON ASKI MİLİ	2
44	145-002	50 MM.LİK PİSTON LAMASI	1
45	550-015	50'LİK ÖZEL PİSTON	1



3. SAFETY

3.1. SAFETY INFORMATION

The symbols shown hereunder are necessary to be read with special attention. Not reading or observing of them may cause damage to the equipment or personal injury.

IMPORTANT

The **IMPORTANT** symbol above is one telling to apply special care and to be careful at carrying out the specified operation.

CAUTION!

The **CAUTION!** Symbol above warns you against specific dangers, and requires to read the text. Not observing may cause damage to the equipment.



DANGER WARNING

The above symbol **DANGER WARNING**, warns you against specific dangers, and you have definitely to read them. Negligence may cause damage to the equipment and bodily injury.

Read the user's manual carefully before using the machine or carrying out maintenance works.



3.2. ACCIDENT PREVENTION

3.2.1. Our machines are manufactured in accordance with EN 60204-1 and EN 292-2 CE safety directives, which cover national and international safety directives.

3.2.2. It is the task of the employer to warn his staff against accident risks, to train them on prevention of accidents, to provide for necessary safety equipment and devices for the operator's safety.

3.2.3. Before starting to work with the machine, the operator should check the features of the machine, learn all details of the machine's operation.

3.2.4. Machine should be operated only by staff members, who have read and understood the contents of this manual.

3.2.5. All directives, recommendations and general safety rules contained in this manual have to be observed fully. The machine cannot be operated in any way for purposes other than those described herein. Otherwise, the manufacturer shall not be deemed responsible for any damages or injuries. And such circumstances would lead to the termination of the warranty.

3.3. GENERAL SAFETY INFORMATION



3.3.1. The power cable should be led in such a way that nobody can step on it or nothing can be placed on it. Special care has to be taken regarding the inlet and outlet sockets.



3.3.2. If the power cable should be damaged during operation, don't touch and unplug it. Never use damaged power cables.

3.3.3. Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated values.



3.3.4. Don't place your hands between parts in motion.



3.3.5. Use protective eye glasses and ear plugs. Don't wear oversize clothes and jewels. These can be caught by moving parts.



3.3.6. Keep your working place always clean, dry and tidy for accident prevention and safe operation.



3.3.7. Use correct illumination for the safety of the operator. (ISO 8995-89 The Lighting of Indoor Work Systems)

3.3.8. Don't leave anything on the machine.

3.3.9. Don't use any materials other than those recommended by the manufacturer for cutting operations on the machine.

3.3.10. Ensure that the work piece is clamped appropriately by the machine's clamp or vice.



3.3.11. Ensure safe working position, always keep your balance.

3.3.12. Keep your machine always clean for safe operation. Follow the instructions at maintenance and replacement of accessories. Check the plug and cable regularly. If damaged, let it replace by a qualified electrician. Keep handles and grips free of any oil and grease.

3.3.13. Unplug first, before conducting and maintenance works.

3.3.14. Ensure that any keys or adjustment tools have been removed before operating the machine.

3.3.15. If you are required to operate the machine outside, use only appropriate extension cables.

3.3.16. Repairs should be carried out by qualified technicians only. Otherwise, accidents may occur.

3.3.17. Before starting a new operation, check the appropriate function of protective devices and tools, ensure that they work properly. All conditions have to be fulfilled in order to ensure proper operation of your machine. Damaged protective parts and equipment have to be replaced or repaired properly (by the manufacturer or dealer).

3.3.18. Don't use machines with improper functioning buttons and switches.

3.3.19. Don't keep flammable, combustive liquids and materials next to the machine and electric connections.

4. TRANSPORT OF THE MACHINE

IMPORTANT



* The transport should be done by qualified personnel only.

4.1. The machine should be transported by lifting with proper equipment (not touching the ground during the transport).

4.2. The Machine is delivered wrapped in nylon as packaging, unless other form of packing is agreed upon with the customer.

4.3. For the weight and overall dimensions of the machine see Technical Features.

5. INSTALLATION OF THE MACHINE

IMPORTANT

Remove the bolts and stopper connections first, which are used to fix the moving parts, before making the electric and pneumatic connections, and starting the machine.

5.1 Place the machine onto an even ground. The overall dimensions of the machine are stipulated under Overall Dimensions page. The working area should be in accordance with this size requirement.

5.2 Ensure balancing of the machine on the ground by using the adjustment screws on the rear feet of the machine.

5.3 Make the air connection with a hose appropriate to the sleeve diameter.

5.4 Your machine has been designed for operation under 400 V 50 Hz (220V/440V 60Hz). Let the electric installation carry out by a qualified electrician.

5.5 Check the rotation direction of the cutters after making the electric connection.

5.6 Ensure that the air pressure of the conditioner is between 6-8 Bar (90-120 psi).



6. MACHINE SAFETY INFORMATION

Read the user's manual carefully before starting to operate the machine, and follow the instructions stipulated therein.

- 6.1 Your machine operates with 400V ~ 3 N PE 50Hz (220V/440V 60Hz). Let the electric installation of your machine carry out by a qualified electrician only.
- 6.2 Lifting, installation, electric, pneumatic maintenance of the machine should be carried out by qualified personnel only.
- 6.3 Routine maintenance and scheduled maintenance should be carried out by qualified personnel after unplugging the machine and disconnecting the air supply first.
- 6.4 Ensure that the machine has been cleaned, tested and maintained before starting to operate.
- 6.5 Check the safety devices, power cable and moving parts regularly. Don't operate the machine before having replaced defective safety devices or faulty parts.
- 6.6 Keep foreign materials away from the working area of the machine, keep away from the machine's moving parts.
- 6.7 Protect the cutter tips against impacts.
- 6.8 Never open the upper covers (Figure 1, No. 9) during the operation of the machine.

7. OPERATION

- 7.1 Check the power and air supply to the machine.
- 7.2 Place the welded profile onto the machine table, and lean them evenly against the set squares (Figure 2, No. 30).
- 7.3 Select the necessary operation through the position selection button (Figure 1, No. 14).
- 7.4 Press the Motor Start button (Figure 1, No. 13) to start the machine. Then press the foot pedal. The machine will carry out the cleaning operation and stop automatically.
***Never put your hands between moving parts.**

7.5 In case of any emergency situation press the Emergency Stop button (Figure 1, No. 15) located on the control panel.

7.1. CHANGING THE CUTTER GROUP

7.1.1 Open the back cover.

7.1.2 Press button No. 1. The bushing, which holds the cutter group, will rise.

7.1.3 Remove the tightening bushing (No.2 in Illustration 1) and take out the cutter group. Insert the desired cutter group onto the shaft. Press the button No. 1 again and insert the tightening bushing.

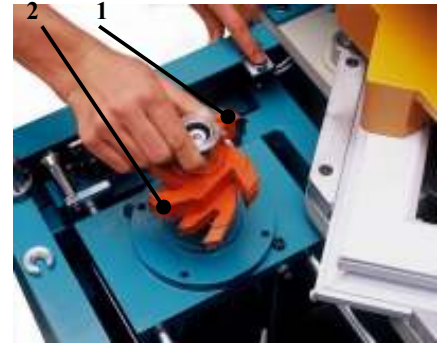


Illustration-1

7.2. ADJUSTING THE MACHINE'S AIR PRESSURE

The air pressure of the machine has to be between 6-8 Bar for proper functioning of the pneumatic system. Don't operate the machine with an air pressure lower than 6 Bar (90 psi). To adjust and to check the air pressure, read the manometer on the conditioner (See Figure 2).

7.2.1 Pull the adjustment button of the conditioner upwards.

7.2.2 Turning the adjustment button in clockwise direction increases the pressure, turning it in counter clockwise direction decreases the pressure.

7.2.3 Once you read 6-8 Bar on the manometer, push the adjustment button of the conditioner down and lock it in that position.

7.2.4 The conditioner unit collects the water within the air system in a receptacle in order to prevent damage to the pneumatic system components. Discharge this water periodically (at the end of the working day) by pressing or opening the button under the conditioner.

7.2.5 The manufacturer recommends to use the following oils with the conditioner: TELLUS C 10 / BP ENERGOL HLP 10/ MOBIL DTE LIGHT / PETROL OFISI SPINDURA 10.

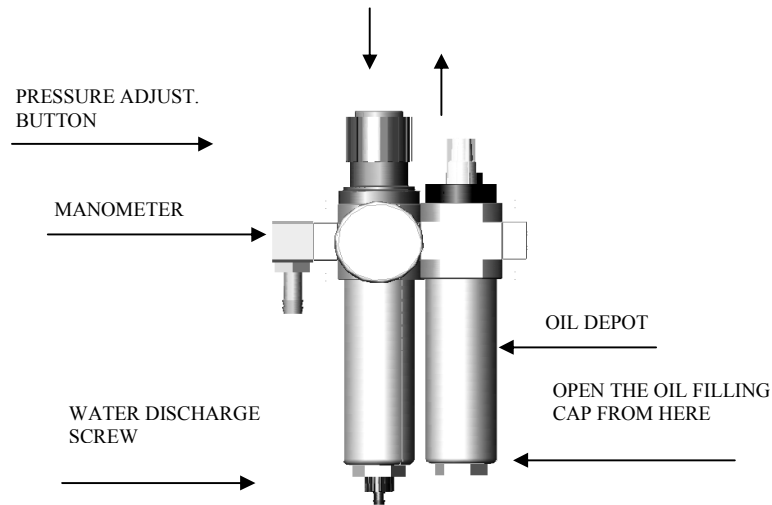


Illustration-2

8. MAINTENANCE

8.1. PERIODIC CHECKS

8.1.1 Ensure that the table and all parts are clean and dry. Degrease the table and dry it.

8.1.2 Clean the machine surface.

8.1.3 Check the pressure of the air pressure system.

8.1.4 Check the air pressure filter and the oil level of the conditioner. Fill up oil, if necessary (Illustration 2).

8.2 MAINTENANCE AT THE END OF WORKING DAY

8.2.1 Disconnect the electric and air supply to the machine.

8.2.2 Clean the machine surface and remove all foreign materials.

8.2.3 After cleaning the table, dry it with a cloth (don't use aggressive substances for cleaning, which could damage the paint).



Unplug and disconnect the air pressure connections first, before carrying out these works.



9. TROUBLESHOOTING GUIDE

Here are some recommendations for solving urgent problems. If the trouble cannot be solved, or if you have a problem other than those described hereunder, please contact our technical service or your nearest dealer.

TROUBLES	CAUSES	REMEDY
Motor does not work	No power supply to the machine The back cover of the machine is open	Check electric cable connections. Check the power sockets. Check the back cover.
Motor works, but the pneumatic system does not.	Air supply connections faulty or missing.	Check the air compressor connections. Adjust the air pressure on the machine's conditioner between 6-8 bar.
Cutters rotate in reverse direction.	The electric connections, power cord or the socket connection is faulty.	Let the electric connections carry out by a qualified electrician.



10. ELECTRIC/ PNEUMATIC COMPONENTS

10.1 ELECTRIC COMPONENTS

10.2 PNEUMATIC COMPONENTS

ORDER NO.	PART NO.	QTY	ORDER NO.	PART NAME	QTY
161-001	FOOT PEDAL	1	241-005	AIR GUN HOSE	5 m
161-002	ELECTRIC SWITCH XCK P102	4	241-009	CONDITIONER FRC-1/8 D-MINI	1
161-006	MAIN SWITCH KG 10B	1	241-013	VALVE MFH-5-1/8	3
161-012	SWITCH MNI MIMI	1	241-015	1/8 MANUAL REDUCER	6
162-001	2 POLAR RELAIS 4052 24 AC	1	242-001	AIR GUN	1
162-002	4 POLAR RELAIS RXN41G11 B7	2	242-010	PISTON ANKLE CONNECTION	1
162-004	CONTACTOR LC1 K 06	3	242-016	PISTON 50x180 PAG Y	3
162-010	THERMAL SWITCH 0310	1	242-017	PISTON 50x90 PAG Y	1
162-012	TRANSFORMER ABL6 TS06B	1	243-004	1/4 HOSE INLET SLEEVE	1
162-013	VALVE COIL DVC 24 V	1	243-008	1/4 TRIPLE DISTRIBUTOR	1
162-014	TIMER RELAIS RE 8TA 11BUTQ	2	243-012	1/4-6 QSL ANKLE	5
550-013	3-PHASE ELECTRIC MOTOR	1	243-015	¼ - 8 SLEEVE	1
164-013	4x1.5 POWER CABLE	1	243-021	1/8 T DISTRIBUTOR	6
165-012	STOPPER CONNECTOR WGD1	5	243-023	1/8-6 ANKLE	3
165-028	TERMINAL PLATE NPP 2.5 10	11	243-025	1/8-6 STRAIGHT SLEEVE	8
165-041	RELAIS SOCKET RXZ 7 G	2	243-032	DISTRIBUTOR 1631 02 1/8x43	1
165-043	FUSE CONNECTOR UK 5-HS	1	550-015	50mm SPECIAL PISTON	1
165-048	GROUNDING CONNECTOR WGT4	2	550-017	CENTRAL. GUIDE PISTON	2
165-054	CONTACTOR SWITCH	1			
165-053	VACUM VALVE BUTTON	1			
165-013	FINDER SOCKET	1			