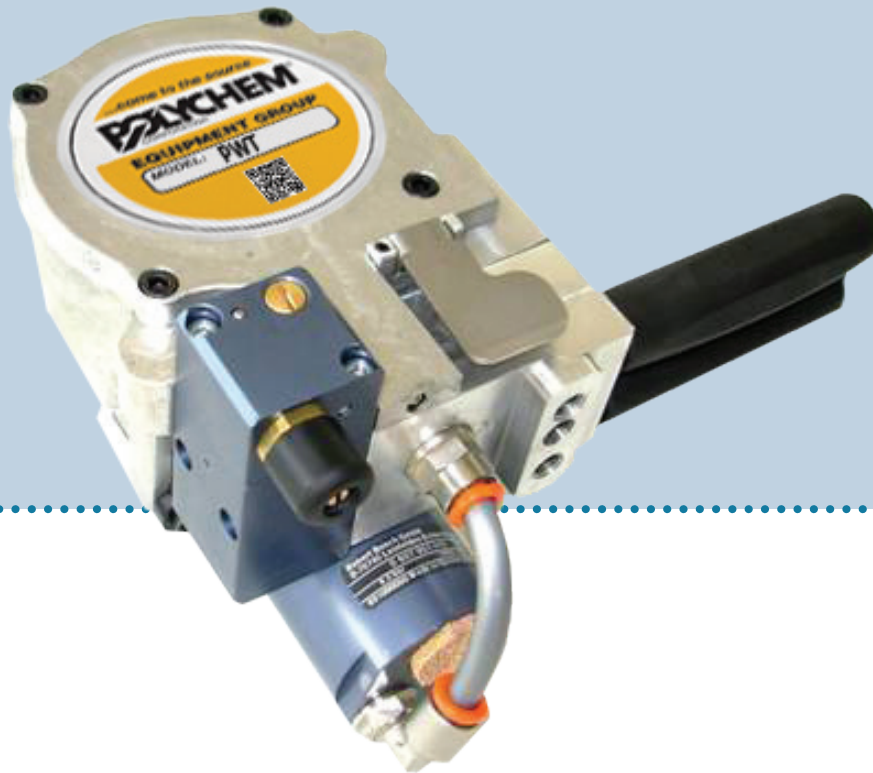




PWT

OPERATION MANUAL | SPARE PARTS LIST

PNEUMATIC PLASTIC STRAPPING TOOL



READ ALL INSTRUCTIONS BEFORE OPERATING THE TOOL

POLYCHEM CORPORATION
6277 HEISLEY ROAD, MENTOR, OHIO 44060
PHONE: 440.357.1500, FAX: 440.352.9553
WWW.POLYCHEM.COM

ED. 08/11

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1) SAFETY INSTRUCTIONS



READ THE OPERATING INSTRUCTION CAREFULLY



WHEN OPERATING THE TOOL, WEAR EYE, FACE AND HAND SAFETY PROTECTION



GENERAL SAFETY INSTRUCTIONS :

The tool must be used by properly trained people. Failure to follow the operating instructions or improper use could cause strap breakage, injuries, or package damages.

Check tool daily, do not use tool with worn or damaged parts. Use original spare parts for replacement. Never modify any tool part.

Do not put fingers, hands or other body parts between the strap and package during the cycle.

It is your responsibility to check the seal joints made by your tool. Training about the weld time adjustment will be useful to check the seal quality in order to avoid severe injury. Never move goods with bad quality seals. Only use specific strap dispenser to dispense the strap. Keep your working area clean and always use the tool in good balance and safety conditions. Never use straps as a means of pulling or lifting goods.

Always use a proper safety strap cutter and keep other people and yourself at a safe distance from strap, always stand to side of strap, away from direction of strap trajectory once cut. Hold the upper strap portion and pay attention that the lower strap will snap forward away from you.

Improper operation, excessive tensioning, use of non-recommended strap, or sharp corners on the package could cause a loss of strap tension and/or strap breakage that could lead to packaging failure or injury. The following is recommended; use edge protectors if package has sharp corners, place the strap correctly around a properly positioned package, stand in safety position (on one side of strap) during strapping cycle, and use the correct strap quality, width, thickness, and break strength as recommended in this manual.

Please save this manual, as it is a part of the tool. This tool is manufactured without any substances which could be dangerous to health. National instructions must be observed for disposal of all the parts.



GENERAL SAFETY INSTRUCTIONS FOR COMPRESSED AIR:

Never operate this tool using bottled air or other gas source. Do not exceed the air pressure range as shown in this operation manual. For all adjustments, repairs or cleaning of the tool, always disconnect air supply. Always use dry, clean and lubricated compressed air.

2) TECHNICAL DATA

TOOL SIZE	
Length:	250 mm – 9.8"
Width:	130 mm – 5.1"
Height:	120mm – 4.7"
Weight:	2.6 kgs – 5.7 lbs
REQUIRED AIR	
Pressure range:	4.5-7 bar / 64-99 psi
PERFORMANCE	
Sealing:	Friction seal
Joint strength:	80% plastic strap strength*

- depends on strap quality

CHART OF TYPES

ITEM	MODEL	STRAP	THICKNESS
T189901 T182501	PWT	PP-PET 16-19mm / 5/8"- 3/4" PET 25mm – 1"	>0.016" – 0.055"<

3) WARRANTY

Polychem Corporation warrants all its tools and battery chargers during a period of 6 months from the shipping date document. Wear parts are warranted for 45 days, otherwise wear parts are excluded from regular warranty, wear parts are shown on spare parts list (in tool manual).

Warranty includes free replacement parts. The warranty is not valid in case of improper use, lack of maintenance, tampering, arbitrary modifications and reparations, use of non-original parts, disregard of instructions of the operation manual, or missing serial number. No compensation can be claimed for production shutdowns and for damages to people and objects due to tool defects. Polychem Corporation reserves the right to modify the tools and documentation without any obligation to update previous ones.

Polychem warrants all its batteries during a period of 120 days from the shipping date document. The manufacturer is committed to replace it with a free battery only when there are manufacturing defects that make it unfit for use.

4) INSTALLATION

It is recommended to always use a dryer unit near the compressor and a filter-regulator-lubricator unit with pressure gauge (Polychem part # 200-0025) close to the tool air connection to avoid water and dirt in the valves or in the pneumatic motors. Connect the tool to air with quick connector 1/4" and use minimum 8mm or 3/8" internal diameter pipe; max length for flexible pipe 10 m between tool and regulator group. Check that your compressor / air distribution plant is able to supply the right air quantity as shown in the operation manual without losing pressure.

TOOL AIR CONNECTION

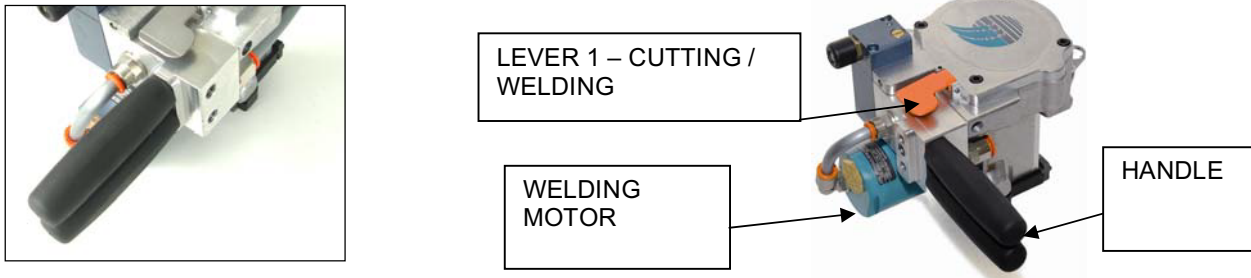


200-0025



5) OPERATING ELEMENTS-ADJUSTMENTS

- **DO NOT OPERATE THE TOOL WITHOUT STRAP. YOU COULD DAMAGE THE WELDING / CUTTING GROUP**



Handle rotation

It is possible to change the handle position 90°. To change the position you unscrew the handle and move it as pictured.

Welding time adjustment

The welding time can be adjusted with a screwdriver as shown in picture A; turning clockwise will increase the time, and counter clockwise will decrease the time.



Strap size conversion

(B1)



Front strap guide (1)

(B2)



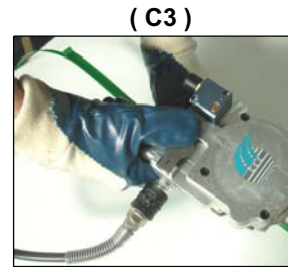
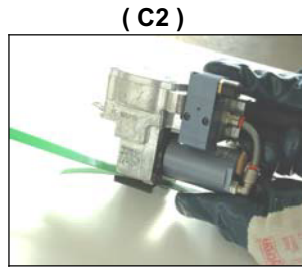
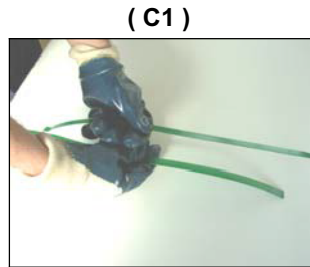
Rear strap guide (2)

To set the tool for 16mm 5/8" and 19mm 3/4" strap sizes follow the instructions below:

19 > 16 3/4" > 5/8"	Turn the strap guides 1 and 2 in 16mm 5/8" position (pic.B1-B2)
16 > 19 5/8" > 3/4"	Turn the strap guides 1 and 2 in 19mm 3/4" position (pic.B1-B2)

6) OPERATION

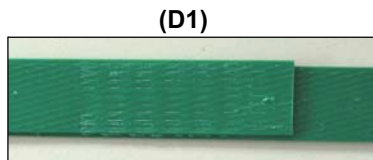
Wrap the parcel to be bound with the strap, as shown in **(pic.C1)**, (make sure that the strap is clean, and oil and grease free); align the two straps and insert them between the body and bottom plate, against the front / rear strap guides **(pic.C2)**, push lever 1 one time to cut and weld the strap. **(pic.C3)**. Remove the tool.



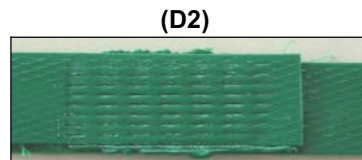
WARNING : Wait 2-3 seconds after the welding cycle to cool the strap before releasing it

Seal check

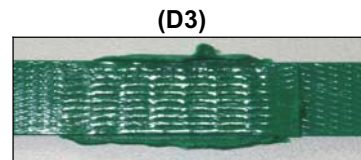
A regular seal quality control is very important and it can be checked visually as follows:



NO – seal strength insufficient
Weld time too short



YES -- right



NO – seal strength affected
Weld time too long

7) SERVICING

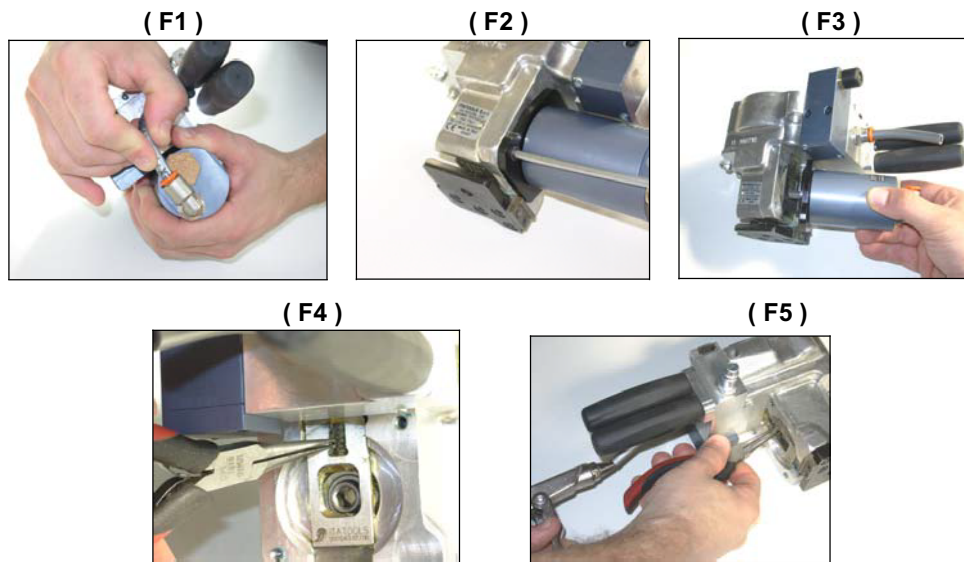
DISCONNECT TOOL FROM COMPRESSED AIR LINE BEFORE PERFORMING ANY SERVICE

Periodically clean the tool from strap dust, particularly the gripper plates and the cutter using compressed air.
(Do not use other tools or keys) **(pic. E)**

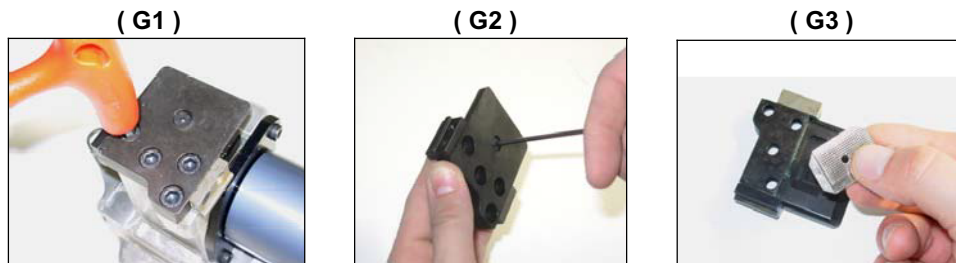


Cutter replacement

Disconnect the air pipe from welding motor (**pic.F1**), remove the 2 locking motor screws (**pic.F2**), remove the motor (**pic.F3**). Pull out the cutter spring with pliers (**pic.F4**), remove the cutter by inserting air into the disconnected pipe to push the piston down to free the cutter and then remove it from its seat with pliers (**pic.F5**). Replace it and reassemble in reverse order putting grease on spring and cutter seat.



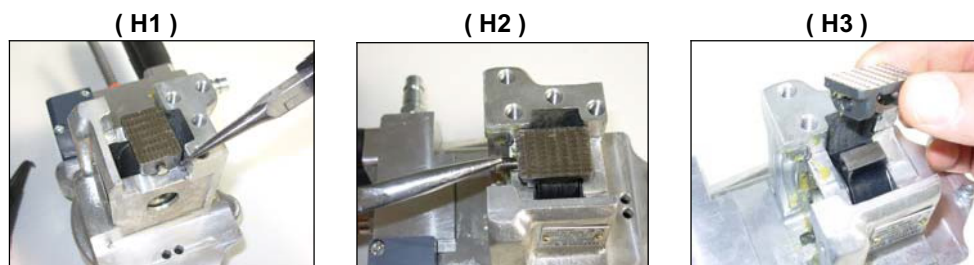
Grippers replacement



Remove the 4 bottom plate screws (**pic.G1**), unscrew the gripper screw (**pic.G2**), replace the parts (**pic.G3**), and reassemble in reverse order.

Welding gripper replacement

Remove the cutter as shown in **F1 to F5** sequence, remove the bottom plate as point **G1**, remove the safety circlip from welding gripper pin (**pic.H1**), remove the pin from welding gripper (**pic.H2**), and replace the worn out part(**pic.H3**) . Reassemble all parts in reverse order. It is advised to replace the safety circlip with a new one.



8)TROUBLESHOOTING

PROBLEM
REMEDY
Air leaking
Check the air connection. May need to replace the gaskets (contact the after sale service)
The seal is weak; the upper strap isn't completely cut; the cutting is inconsistent
Improper weld time adjustment set it properly. Check if the sealing foot and the cutter are damaged or worn out. Check if the sealing foot is dirty or slides on strap. Check the air pressure value. Check if the strap qualities are right for the strapping tool and application. Check if the sealing motor or the pneumatic valve is locked or dirty (contact the after sale service), try to clean the timer valve, check the air circuit.
The strap is breaking while sealing
Improper weld time adjustment, may be too long, set it properly.
Both straps are cut while sealing
Check if the gripper plate is dirty or damaged (clean or replace it). Improper weld time adjustment, may be too long.
The sealing time is inconsistent
Timer valve problem, try to clean, lubricate or replace it (contact the after sale service)

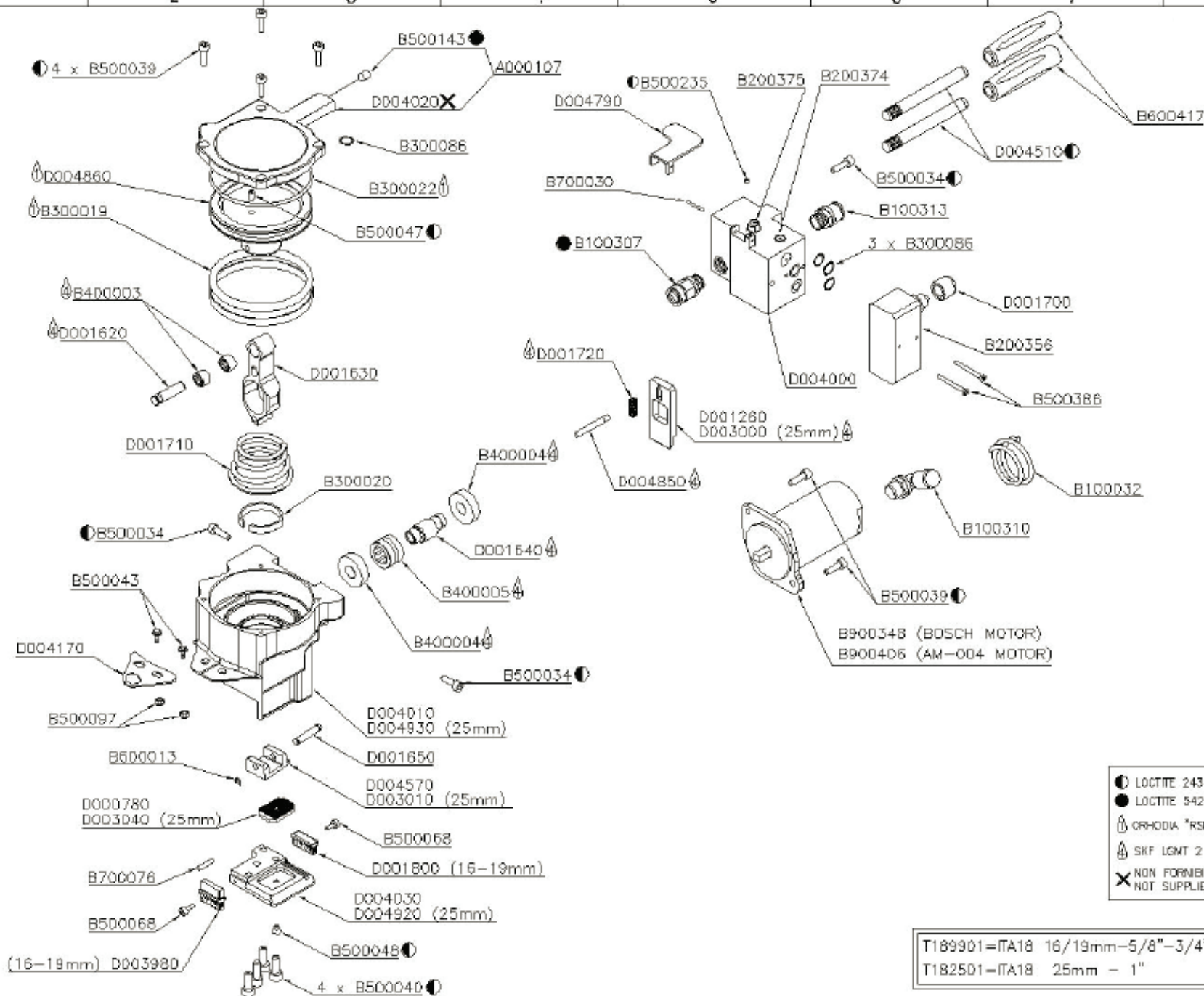
9) SPARE PARTS LIST

POLYCHEM PART #	ITEM	DESCRIPTION	QNTY		
189825	A000107	ASSEMBLED COVER	1		
186897	B100032	PIPE 6x8	0,08 mt		*
189707	B100307	CONN. DIR 10 1/4 RL1 (2L01012)	1		
189137	B100310	SWING ELBOW RL31 8 1/4 (2L31011)	1		*
189185	B100313	CONNECTION RL1 08 1/4 (2L01010)	1		*
189154	B200356	VALV 2VIE TEMP AZ10.017.4	1		*
189704	B200374	KIT AIR STOPPER 1/8"F0.5 AZ 11.005.2	1		
189126	B200375	KIT MICROVALVE NC AZ 08.022.2	1		
189471	B300022	O-RING 3300 (D85)	1		
189472	B300019	GASKET RING RP6287.85	1		
189120	B300020	GASKET TEFLON + BRONZE 1.5x6.1 IN MTS	0,11		
189667	B300086	O-RING OR108 (D9)	4		
189146	B400003	ROLLER BEARING HK0808 INA	2		
189176	B400004	BEARING 6001 2Z	2		
189149	B400005	ROLLER BEARING NK1616	1		
189699	B500034	SCREW UNC 10-24x5/8" ANSI B18.3	3		
189136	B500039	SCREW UNC10-24x1/2"	6		*
189141	B500040	SCREW M6x16 UNI5931	4		*
189179	B500043	SCREW M5x12	2		
189698	B500047	SCREW M5x8 UNI5925	1		
189438	B500048	SCREW M4x6 UNI5933	1		*
190161	B500068	SCREW M3X8 UNI 5931	2		
189700	B500097	SELFLOCK M5 DIN985 5S	2		
189819	B500143	SCREW M6X6 UNI5927	1		
189703	B500235	SCREW M3X4 UNI5929	1		
189761	B500386	SCREW M4x30 DIN7984	2		
189153	B600013	CIRCLIP H5	1		
189705	B600417	RUBBER GRIP	2		
189500	B700030	PIN 3x24 DIN6325	1		
190062	B700076	PIN 4x12 DIN6325 R220	1		
189134	B900348	PNEUMATIC BOSCH MOTOR 0607951449	1		
189820	B900406	PNEUMATIC MOTOR AM-004	1		
189157	D000780	LOCKING STRAP PLATE	1	§	*
189133	D001260	CUTTER	1	§	*
189282	D001620	CONNECTING ROD PIN	1		
189150	D001630	CONNECTING ROD	1		
189482	D001640	EXCENTRIC SHAFT	1		
189152	D001650	WELDING FOOT PIN	1		
189160	D001700	COVER	1		
189121	D001710	PISTON SPRING	1		
189232	D001720	STRONG CUTTER SPRING	1		
189586	D001800	REAR STRAP GUIDE	1		
189821	D003000	CUTTER (1"STRAP)	1	§	*
189822	D003010	WELDING FOOT (1"STRAP)	1	§	*
189823	D003040	LOCKING STRAP PLATE (1"STRAP)	1	§	*
189598	D003980	FRONT STRAP GUIDE	1		
189824	D004000	PNEUMATIC VALVE	1		
189708	D004010	MAIN FRAME	1		
189701	D004030	BOTTOM PLATE	1		
189826	D004170				
189706	D004510	GRIP PIN	2		

189764	D004570	WELDING FOOT	1	§	*
189702	D004790	WELDING START LEVER	1		
189765	D004850	CUTTER PIN	1		
189766	D004860	PISTON	1		
189827	D004920	BOTTOM PLATE (1"STRAP)	1		
189828	D004930	MAIN FRAME (1"STRAP)	1		

§	WEARING PART
*	PART THAT SHOULD BE STOCKED

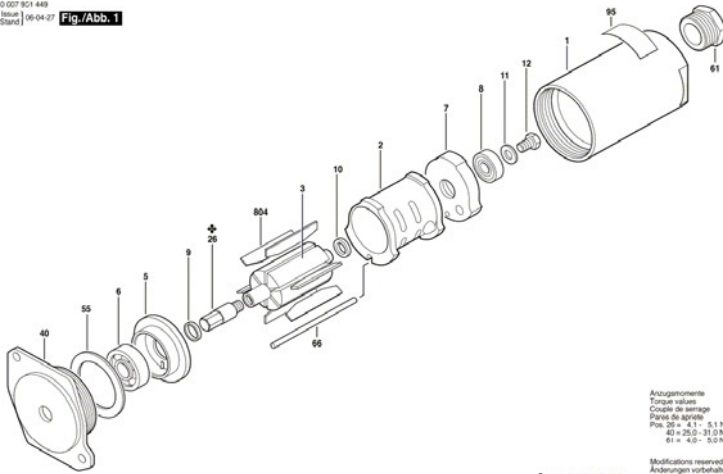
PWT



BOSCH 0 607 951 449 – POLYCHEM 400-0036
WELDING MOTOR

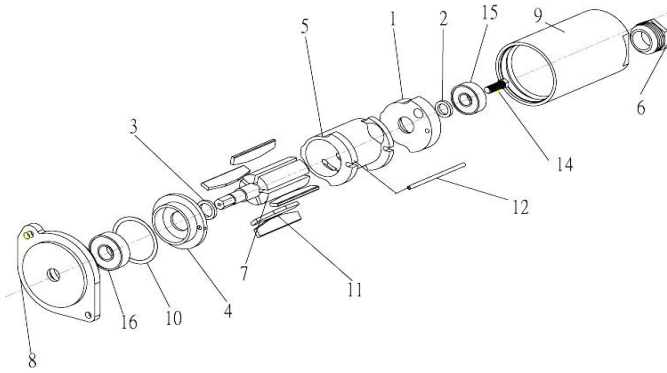
0 007 901 449
Issue 1 06-04-97
Stand 1

Fig./Abb. 1



REF.	ITEM	DESCRPT.	QTY	JDE PART #
1	3 605 125 063	Housing	1	X
2	3 604 090 009	Cylinder	1	X
3	3 604 220 005	Roller	1	X
5	3 605 700 167	Front plate	1	X
6	1 900 905 127	Bearing	1	X
7	3 605 700 010	End plate	1	X
8	1 900 905 029	Bearing	1	X
9	2 600 202 007	Washer	1	X
10	3 600 202 004	Washer	1	190193
11	2 916 011 012	Washer	1	X
12	2 911 061 150	Screw	1	190192
26	3 606 337 209	Pin	1	X
40	3 600 390 040	Cap	1	189697
55	3 600 100 048	Washer	2	190003
61	3 603 462 017	Silencer	1	189272
66	3 604 710 032	Roll pin	1	X
95	3 601 108 047	Label	1	X
804	3 607 030 280	Blade	1	X

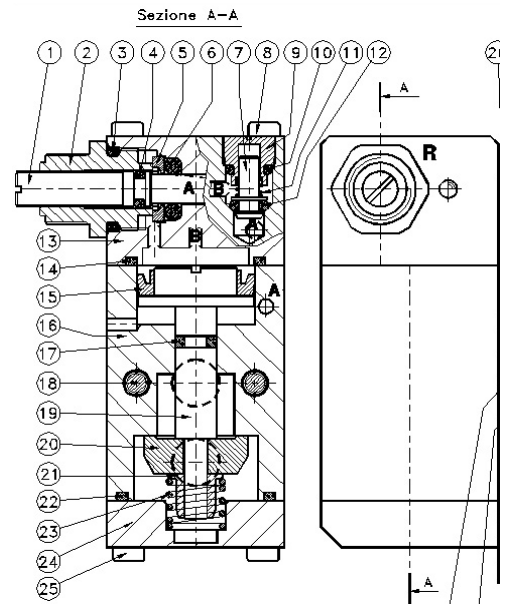
AM-0004-P-0703B-MI- POLYCHEM 401-0274
WELDING MOTOR



REF.	ITEM	DESCRIPTION	Q.TY
1	AM0004-01	End Plate	1
2	AM0004-02	End Washer	1
3	AM0004-03	Front Washer	1
4	AM0004-04	Front Plate	1
5	AM0004-05	Cylinder	1
6	AM0004-06	Silencer	1
7	AM0004-07	Roller	1
8	AM0004-08	Cap	1
9	AM0004-09	Housing	1
10	AM0004-10	Washer	1
11	AM0004-11	Blade	5
12	AM0004-12	Roll Pin	1
14	AM0004-14	Screw	1
15	AM0004-15	Bearing	1
16	AM0004-16	Bearing	1

400-0060 (B200356) – TIMER VALVE

REF.	JDE ITEM #	ITEM	DESCRIPTION	QNTY
1	X	10.077.0	SPILLO 1/8.1 TAGLIO CACC RIBASS	1
2	X	12.002.1	NIPPLO REGOLATORE 1814	1
3	189296	OR 2043	OR 2043	1
4	189499	OR 102	OR 102 DA LUBRIFICARE	1
5	189983	12.103.1	PREMIGUARNIZIONE REG. 908	1
6	X	5*3*11	OR NBR 70 5*3*11	1
7	X	12.104.0	OTTURATORE REG. 908	1
8	190015	M4*20	VITE TCCE M4*20 UNI 5931 8G	2
9	X	12.101.0	GUIDA OTTURATORE PER REG.908	1
10	X	OR 103	OR 103	1
11	X	12.102.0	MOLLA 908	1
12	X	OR 101	OR 101	1
13	X	10.089.1	COMAND 2 VIE OTTURAT+RFU+VNR	1
14	189989	OR 2081	OR 2081	2
15	X	01.014.0	GUARNIZ LABBRO DE20	1
16	204100	10.040.1	CORPO VALV 2 VIE OTTUR CON TEMP	1
17	189499	OR 102	OR 102	3
18	189155	M4*30	VITE TCCE M4*30 UNI 5931 ZINC.BIANCO	2
19	190016	10.043.0/S	PISTONE D.20 CON SPOLA	1
20	189711	03.032.0	OTTURATORE VERDE	1
21	189631	03.025.0	GUIDA MOLLA	1
22	X	OR 2093	OR 2093	1
23	190002	11.040.0	MOLLA RSW 1/8	1
24	X	10.042.1	FONDELLO VALV 2 VIE OTTUR	1
25	X	M4*10	VITE TCCE M4*10 UNI 5931 8G	2



CE DECLARATION OF CONFORMITY

Polychem Corporation declares under own responsibility that the under mentioned machinery, to which this declarations refers, is in conformity with **2006/42/CE** Directive and successive modifications, as well as with standards **EN12100-1 / EN12100-2**

MODEL: Series PWT



MACHINE TYPE

PNEUMATIC PLASTIC STRAPPING TOOL

POLYCHEM CORPORATION

6277 HEISLEY ROAD
MENTOR, OHIO 44060

Tel.: 440-357-1500 Fax: 440-352-9553 www.polychem.com

Manufactured in Italy

