

# POLIVAC

INTERNATIONAL PTY LTD

## POLIVAC GAS STRIPPER STRIPPING MACHINE ST2100



### Operations Manual & Trouble Shooting Guide



# OWNER'S MANUAL TABLE OF CONTENTS

<b>Introduction .....</b>	<b>4</b>
<b>Use &amp; Care .....</b>	<b>4</b>
<b>Safety Precautions .....</b>	<b>4</b>
<b>Unpacking Instructions .....</b>	<b>5</b>
<b>Machine Preparation .....</b>	<b>5</b>
<b>Starting the Engine .....</b>	<b>5</b>
<b>Operation of Stripper .....</b>	<b>5</b>
<b>Stopping the Engine .....</b>	<b>5</b>
<b>Maintenance .....</b>	<b>6</b>
<b>Do's &amp; Don'ts .....</b>	<b>7</b>
<b>Machine's Bottom Diagram.....</b>	<b>8</b>
<b>Machine's Top Diagram .....</b>	<b>9</b>
<b>Parts List .....</b>	<b>10 &amp; 11</b>
<b>Warranty Policy .....</b>	<b>12</b>

## IMPORTANT

The following details should be recorded here for your records.

- **Machine Model:** \_\_\_\_\_
- **Machine Serial Number:** \_\_\_\_\_
- **Motor Type:** \_\_\_\_\_
- **Motor Serial Number:** \_\_\_\_\_
- **Purchase Date:** \_\_\_\_\_
- **Purchase From:** \_\_\_\_\_
- **Invoice Number:** \_\_\_\_\_

# INTRODUCTION

**Congratulations** on your purchase of a Polivac Gas Stripping Machine.

This machine has been designed to produce an optimum result with a minimum of effort and investment.

For you to receive the utmost from your investment and keep your machine serving you for many years to come, you will need to establish a proper maintenance schedule.

Premature failure of the engine can be quite expensive and is the major reason for machine downtime.

It is essential that the items listed below are constantly addressed.

**NB This manual should be read and implemented in conjunction with the motor manufacturers manual.**

1. **OVERHEATING** is the major cause of engine failure. Keep the cooling air debris filter clean. Protect your machine and allow any foreign matter to build up on the cooling fins of the engine.
2. **LOW AND DIRTY OIL** is the next most common cause of the engine failure.
  - Change the oil according to the motor manufacturers recommendations and check the oil level and condition daily before each use.
3. **YOUR GAS STRIPPER MUST NEVER BE TILTED ON TO THE LEFT HAND SIDE (VIEWING FROM BEHIND THE UNIT).**
  - This will cause oil to seep into the carburettor and head of the engine, which will cause excessive smoking and damage to the engine and regulator system.

## USE AND CARE

Before using any new equipment, Polivac strongly recommends following safety precautions for all owners and operators of gas-powered equipment.

## SAFETY PRECAUTIONS

1. Polivac recommends the wearing of protective ear-wear as continuous exposure to high noise levels may cause damage.
2. Do not touch the hot muffler/exhaust.
3. Do not allow any person to come in to contact with the rotating pad and keep other people away from machine whilst it is in operation.
4. Do not leave machine unattended whilst running.
5. Do not leave machine accessible to untrained persons.
6. Do not operate the machine if the pad is off centre, damaged or missing. Substantial damage to the floor, the machine or injury to personnel may result.
7. Vibration from machinery may cause numbness or tingling of the fingers in certain people. Smoking, dampness, diet and heredity may contribute to the symptoms. Wearing warm clothing gloves, exercising and refraining from smoking can reduce the effects of the machine.
8. The machine should be checked for any loose or damaged parts.
9. If a headache develops whilst machine is in operation it should be stopped and checked for carbon monoxide emissions by a qualified repair agent.
10. If the smell of gas is evident, stop using the machine and take it outdoors. Have the source of the leak repaired before continuing operation.
11. Never vent gas inside a building.
12. If your machine develops a high-pitched whistle, stop the engine and check the oil level. (Note newer model are fitted with an alarm or cut off switch)

## **UNPACKING INSTRUCTIONS**

Polivac gas buffers comes packaged in a palletised box designed to protect and secure the machine during transportation. The machine is supplied with no gas cylinder. Before signing the delivery receipt, inspect the packaging for damage (Remove box and check machine for damage). If damage is evident, note the damage on the delivery receipt and contact your supplier.

## **MACHINE OPERATION**

1. Adjust handle to a comfortable working height and tighten belts.
2. Check the engine oil level and condition.
3. Secure the gas cylinder on a machine (at the back of the machine) and lock the belts.
4. Fit and secure gas cylinder hose.
5. Open gas cylinder valve.

## **STARTING THE ENGINE**

1. Set the throttle to the slow position.
2. With the gas cylinder valve open, engage the ignition key to the start position until the engine begins operation, which shouldn't be any longer than 4-5 seconds (in a normal weather condition).

Run the engine at slow throttle position for approximately two minutes to allow efficient warm up. Advance to full throttle and run machine. Preferably your machine should not be operated at anything less than full throttle because a lower speed will cut down the incoming fresh air that is required for the cooling of the engine.

## **OPERATION OF STRIPPER**

With the engine at full throttle, slowly bit the stripper forward until the brush/pad starts to contact the floor. Then proceed to walk forward with the brush in full contact with the floor.

When stripping, avoid any loose surfaces, electrical points, door trims and any object which may come in a contact with the brushes/pads other than the floor itself.

## **STOPPING THE ENGINE**

1. Return the throttle to the extreme slow position.
2. Turn the ignition key back to OFF position & remove the key.
3. Remove the gas line hose from the cylinder.

# MAINTENANCE

## 1. Prior to Use:

- Check the oil level and condition.
- Clean and/or replace engine and carburettor filters.
- Check brush/pad condition.
- Clear engine cooling vanes.
- Check all gas lines and fittings for damage, cuts or leaks.

## 2. 20 Hours / Weekly:

- Check brushes/pads and drive system for any loose or worn parts.
- Check drive belt for wear or slippage, adjust or replace as necessary.
- Check pulleys for tightness.
- Check handle bolts, wheel bolts and engine mounting bolts for tightness.
- Check throttle cable for wear.
- All point in 1.

## 3. 25 Hours 1 Bi-weekly:

- Change oil
- All points in 1 & 2.

## 4. 40 Hours / 1 Monthly:

- Recommended interval for carbon monoxide test.
- All points in 1, 2 & 3.

## 5. 100 Hrs / 16 Months:

- Change spark plug.
- All points in 1, 2, 3 & 4.

## 6. 300 Hours / Yearly:

- Return machine to authorised service centre for complete service.
- Valve clearance to be checked.
- All points in 1, 2, 3, 4 & 5.

## IMPORTANT NOTICE

Polivac would like to direct your attention to the following issues so that correct and safe operation of your gas-powered floor stripping is achieved. The superior performance of gas stripping has led to an increased demand for the use of this type of floor maintenance equipment. This highlights the need for responsible manufacturers, owners and operators to stress the importance of safety. These maintenance points are a guideline to the upkeep of your machine. A more stringent program may be required depending on the type and amount of use that your machine will be subject to.

### DO'S

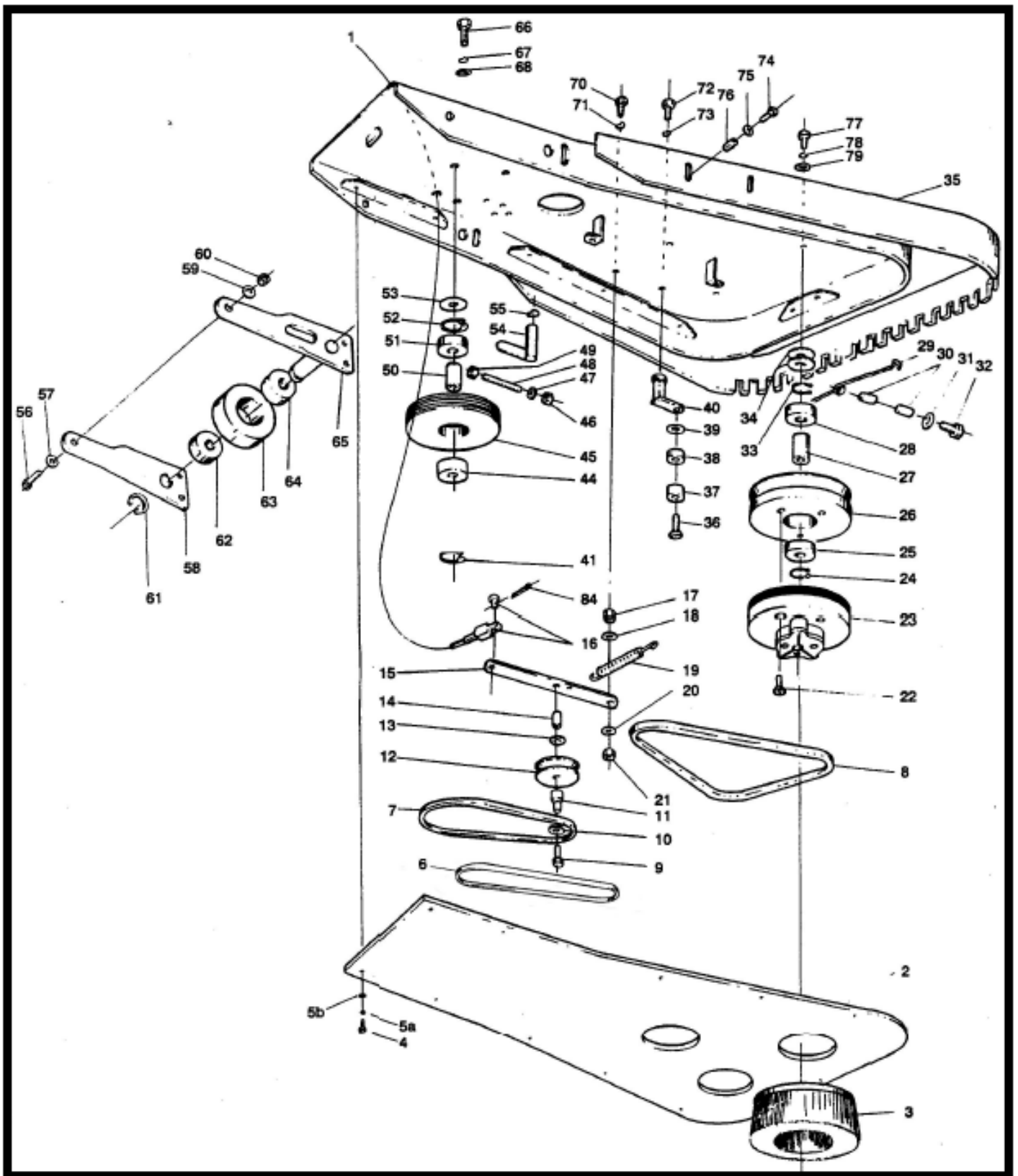
- **DO** check oil level before starting. It is important that the oil is maintained at the correct level for proper lubrication and cooling of the engine. Consult the motor manufacturers manual for correct capacity and oil specifications.
- **DO** check fuel level and hose connection before starting. The entire unit should be visually checked for any loose or damaged hoses, fittings and connections.
- **DO** keep the debris filter clean (foam filter on top of motor) and free of any dust or lint. Any obstructions to the cooling system can cause excessive heating and premature failure of the engine.
- **DO** change the oil at least every month / 140 Hours. One of the primary functions of the oil is to cool the motor. When the oil is dirty or not kept to adequate levels it cannot cool the motor efficiently and can cause premature failure resulting in costly repairs and down time.
- **DO** check belt tension before starting. Incorrectly adjusted belts will cause slipping and premature wear. The belt should have approximately movement when depressed.
- **DO** carry out routine maintenance as specified. This will prevent any unnecessary down time of your machine.
- **DO** run the machine at full throttle. Running the machine at a lower speed will cut down the incoming fresh air that is required for the cooling of the engine.

### DON'TS

- **DO NOT** overfill the gas bottle. Overfilling will cause severe damage to the motor and the gas regulator.
- **DO NOT** tip the machine over on its left-hand side. If it is tipped on this side the oil in the motor will run through the carburettor. This will cause the inability of the unit to start or excessive smoking if it does start.
- **DO NOT** use starting fluid to assist with hard to start engines. Starting fluids can leave a hot spot on the piston, which will cause premature failure of the engine.
- **DO NOT** apply unnecessary pressure up or down on the stripping machine handle. Machine should float easily across the floor.
- **DO NOT** over fill oil. Refer to the motor manufacturers manual for specifications and capacity.
- **DO NOT** strip any floor that has not been properly swept. Loose debris on the floor can become hazardous flying missiles.
- **DO NOT** modify the unit in any way without the written permission of the Polivac International Pty. Ltd. Any unauthorised modifications will void the warranty and Polivac International Pty. Ltd. Will not be responsible for any damages to the unit or caused by the unit.
- **DO NOT** replace the brushes or make any adjustment whilst the motor is running or the gas is turned on.

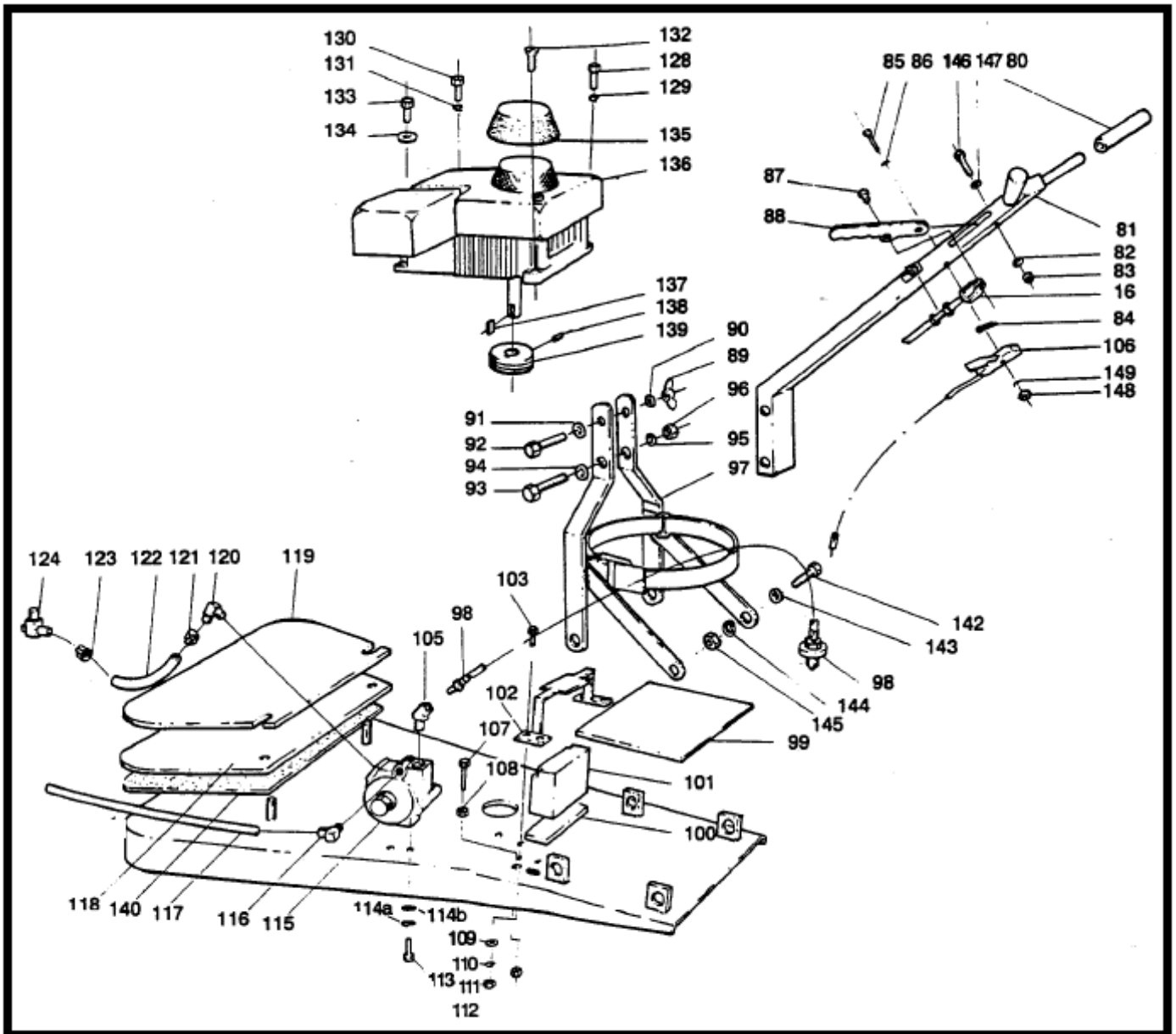
# ST2100 GAS STRIPPER

## GAS STRIPPER PARTS DIAGRAM



# ST2100 GAS STRIPPER

## GAS STRIPPER PARTS DIAGRAM



## ST2100 GAS STRIPPER PARTS LIST

No.	CODE	QTY	DESCRIPTION	No.	CODE	QTY	DESCRIPTION
1	STR00	1	Body	52	GSS036	1	CIRCLIP
2	STR023	1	Splash Guard	53	STR025	1	SPACER
3	STR026	3	Abrasive Brush	54	STR015	1	BELT Aligner
4	AAA564	14	Bolt	55	GAS045	1	Washer Spring
5a	GAS041	1	Spring Washer	56	STR050	6	Bolt
5b	AAG236	14	Flat Washer	57	GAS045	6	Washer
6	STR002	1	B51 V-Belt	58	STR021A	2	Wheel Bracket
7	STR004	1	380J MBL- RIBSTAR	59	GAS069	6	Washer
8	STR003	1	B56 V-Belt	60	STR058	6	Locknut
9	STR052	1	Bolt 3/8 x 2	61	STR035	2	Circlip
10	GAS069	1	Washer Flat	62	VPV230	2	Bearing
11	PART OF 12	1	Big Spacer STR071 Small Spacer VPA782	63	STR013	2	Wheel
12	STR012	1	Pulley-Tensioner/Idler	64	VPV230	2	Bearing
13	GAS069	1	Washer	65	STR021	2	Wheel Axle Brackets
14	VPA782	3	Spacer	66	GAS086	1	½" Bolt
15	STR020	1	Clutch Lever Actuator	67	GAS054	1	Washer Spring
16	STR014	1	Clutch Cable	68	AAG470	1	½" Flat Washer
17	SLB043	1	Nut	70	STR053	1	5/16" Set Screw
18	AAG365	1	Washer	71	GAS045	1	Washer Spring
19	STR043	1	Spring	72	GAS049	1	5/16" Set Screw
20	GAS046	1	Washer	73	GAS045	1	Spring Washer
21	SLB043	1	Nylon Nut	74	AAA564	2	Set Screw
22	STR055	9	Counter Sunk Cap Head	75	SLB040	1	Washer
23	VPA412	3	Quick Release Adaptor	76	206784	1	Spacer
24	GAS031B	3	Circlip	77	GAS060	1	Bolt
25	VPV230	3	Bearing	79	AAG470	3	Washer
26	STR009	3	Pulley-Rear Brush/Drive	80	VPV555	1	Hand Grip Set of 2
27	STR010	3	Spring Clip	81	STR018	1	Handle
28	VPV230	3	Spacer	82	AAG236	1	Washer
29	GAS031A	1	Flat Washer	83	AAF140	1	Locknut
30	206784	2	Set Screw	84	STR059	2	Split Pin
31	SLB040	1	Circlip	87	OF 16		
32	AAA564	1	Spacer	88	STR019	1	Clutch Lever
33	STR025	3	Skirt	89	GAS064	1	Wing Nut
34	STR025	6	Spacer	90	AAG365	1	Washer
35	STR024	1	Skirt	91	AAG365	1	Washer
36	GAS030	1	Counter Sunk Cap Head	92	GAS041	1	Bolt
37	GSS017	1	Bearing	93	GAS041	1	Bolt
38	VPA570	1	Bearing	94	AAG365	1	Washer
39	AAG470	1	Washer	95	GAS045	1	Washer – Spring
40	STR028	1	Belt Tensioner	96	SLB043	1	Locknut
41	GSS034	1	Circlip	97	GSS021	1	Gas Bottle Cage Assy.
44	GSS035	1	Bearing	98	STR027	1	Gas Bottle Hose
45	STR006	1	Pulley-Slave Drive	99	GSS029	1	Foam Support
46	AAF140	1	Nylon Nut	100	STR037	1	Foam Support
47	AAG236	1	Flat Washer	101	GSS013	1	Battery
48	STR031	1	Tension Rod	102	STR022	1	Battery Holder
49	SLB031	1	Nut	103	GAS042	4	R/Head

50	STR011	1	Shaft-Slave Pulley	105	STR030	1	Brass Elbow 45 Degree Fitting
51	GSS035	1	Bearing	106	GAS007	1	Throttle Cable
107	STR056	2	Bolt	129	GAS045	1	Washer Spring
108	GAS055	2	Nut	130	GSS043	1	Bolt
109	GAS062	2	Washer	131	GAS045	1	Washer Spring
110	GAS054	2	Washer Spring	132	STR054	1	Bolt
111	GAS055	2	Nut	133	STR054	1	Bolt
112	GAS058	4	Locknut	134	GAS045	1	Washer Spring
113	AAA564	2	Bolt	135	GSS028	1	Cowl Filter
114a	GAS041	1	Spring washer	136	STR001	1	Motor
114b	AAG236	2	Washer	137	GAS089	1	Key
115	GAS013	1	Gas Regulator	138	GSS044	1	Grub Screw
116	GAS034	1	Brass Fitting Elbow	139	STR005	1	Pulley-Motor
117	GAS077	1	Vacuum Line	140	STR038	1	Foam support
118	STR017	1	Weight (Locating Holes)	141	GAS018	1	Push Start Button
119	STR016	3	Weight (Locating Slots)	142	GAS060	4	Bolt
120	GAS035	1	Brass Fitting Elbow	143	GAS062	4	Washer
121	GAS070	1	Hose Clamp	144	GAS054	4	Washer Spring
122	STR039	1	Gas Hose Line	145	SLB045	4	Locknut
123	GAS070	1	Hose Clamp	146	SLB030	1	Bolt
124	GAS035	1	Brass Fitting Elbow	147	GAS042	1	Washer
128	STR054	1	Bolt	148	GAS058	1	Locknut



# WARRANTY POLICY

1. When a warranty repair is requested, the purchaser must first contact any of Polivac's authorized Service Centres with proof of purchase and details of the alleged defect. In most instances, the request for warranty brought to the attention of our Service Centres or Agents is handled in a prompt routine manner with no question as to its validity. However, some requests for warranty are not justified. In these cases, product owners will be made aware that the premature failure of their product was the result of a cause not covered by Warranty.
2. The Polivac warranty covers only DEFECTIVE MATERIAL and/or DEFECTIVE WORKMANSHIP. It does not cover labour.
3. Polivac products are warranted for twelve (12) months from date of purchase by the original purchaser against faulty workmanship or material. The warranty covers only the replacement, repair or adjustment of any part which in the opinion of Polivac fails because of a fault in materials or workmanship:
  - a) drive motors and gearbox assemblies on electrical products carry a two (2) years warranty
  - b) bodies of carpet extraction products and vacuum cleaners carry a three (3) years conditional warranty.
  - c) battery warranty of twelve (12) months is as provided by the manufacturer. Terms available on request.
4. Where the product has been rented out by a Hire or similar company, the warranty period is reduced to three (3) months.
5. This warranty does not cover service calls, travelling time or consumable parts - e.g. drive belts, chains, flexible skirts or hoses, dust bags, main leads, brushes, buffers, buffer strips, sanding discs, light bulbs, nozzles, filters, pressure pumps, piston seals, diaphragms, squeegees and like items.
6. In the case of proprietary components used by the manufacturer in the product, such as engines, electrical motors, chargers and the like, Polivac will pass on any warranty provided by the manufacture of such items.
7. Accidental damage, abuse, misuse or neglect of the product is not covered by warranty.
8. Fair wear and tear and where the product have been used other than for the purpose for which it was designed is not covered by warranty.
9. Use of non-approved chemicals and detergents in the product will void the warranty.
10. Products that have been modified are not covered by warranty.
11. Products that have not been serviced at their recommended intervals by an authorised Polivac Service Centre or Agent are not covered by warranty
12. Damage to, or failure of, the product which has resulted from low or high voltage, the use of an incorrectly sized extension lead, or a coiled electrical extension lead is not covered by warranty.
13. Repairs carried out on the product by any person other than an authorized Polivac repairer will void the warranty.
14. All freight charges to and from the manufacturer, agent or service centre will be the responsibility of the owner.
15. A charge for traveling time and labour will be applicable for on-site warranty service.
16. Polivac reserves the right to replace defective parts of the product with parts or components of similar quality, grade and composition where an identical part or component is not available. Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired.

**POLIVAC WARRANTY IS SUBJECT TO THE LAWS AND REGULATIONS OF THE INDIVIDUAL STATES AND COMMONWEALTH TERRITORIES OF AUSTRALIA. THIS WARRANTY IS NOT TRANSFERRABLE.**