MAXIMUM TOTAL HEAD - IMPORTANT INSTALLATION INFORMATION							
Model	Max Total Metres Head	Max Pressure KPa	Model	Max Total Metres Head	Max Pressure KPa		
SP200	13.2	129	S2P213	16.3	159		
SP240	14.9	146	S2P263	16.5	161		
SP274	16.2	159	S2P316	18.3	179		
SP312	20.8	204	S2P411	19.7	193		
			S2P453	22.1	217		
MF167	12.9	126					
MF218	14.2	139	S2P263-E Turbo 16.5		161		
MF258	16.2	159	E	3oost 10.8	106		
			F	-ilter 4.7	46		

#### MAINTENANCE

- 1. Clean strainer basket regularly. Do not strike basket to clean.
- 2. Inspect strainer cover O-ring regularly and replace as necessary. Keep cover O-ring lubricated.
- 3. Hayward pumps have self-lubricating motor bearings and shaft seals. No lubrication is necessary.
- 4. Keep motor clean. Insure air vents are free from obstruction.

NB Do not use petroleum based lubricants on gaskets, O-rings or plastic components. Use only silicone based lubricants.

#### A. MOTOR WON'T START

- 1. Check open switches or relays, blown circuit breakers or fuses.
- 2. Ensure power cord is plugged in and power is switched on, (240v Models Only).
- 3. Refer to Authorised Service Agent or other qualified person.

#### **B MOTOR CUTS OUT**

NOTE: Your Hayward pump motor is equipped with Automatic Thermal Overload Protection. The motor will automatically shut-off, under normal conditions, before heat damage buildup, due to an improper operating condition, can occur. The motor will auto-restart when safe heat level is reached.

*If motor fails to restart switch power off and contact an* authorised Hayward Pump Service Technician or other qualified service company.

#### C. MOTOR HUMS, BUT DOES NOT START

If motor fails to start switch power off and contact an authorised Hayward Pump Service Technician or other qualified service company.

#### **D. PUMP WON'T PRIME**

1. Make sure pump/strainer is filled with water, and that cover gasket is clean and properly seated. Tighten hand nuts.

2. Make sure all suction and discharge valves are open and unobstructed, and that pool water level is above all suction openings.

#### E. LOW FLOW—Generally, check for:

- 1. Clogged or restricted strainer or suction line;
- 2. Plugged or restricted discharge line of filter (high discharge gauge reading).
- 3. Air leak in suction (bubbles issuing from return fittings).

#### F. NOISY PUMP—Check for:

- 1. Air leak in suction causing rumbling in pump.
- 2. Cavitation due to restricted or undersized suction line and restricted discharge lines.
- 3. Vibration due to improper mounting, etc.
- 4. Foreign matter in pump housing.
- 5. Motor bearings made unserviceable by wear, rust, or continual overheating. Refer to authorised service agent.
- G. If the Supply Cord is damaged, it must be replaced by the manufacture, its service agent or similarly qualified persons in order to avoid a hazard.

#### **SERVICE & REPAIRS**

Consult your local authorised Hayward dealer or service center. No pumps or motors may be returned directly to the factory without the expressed written authorisation of Hayward Pool Products (Australia) Pty Ltd.

#### Warning

The Pump Motor is an electrical device and as such should not be disassembled or serviced by anyone other than an authorised Hayward Service Technician or qualified Electrical Service Company. An experienced Pool Service Technician should attend to any other problems that cannot be corrected by routine maintenance.



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# **OWNER'S GUIDE**

## **C HAYWARD** SELF-PRIMING

## **Super<sup>™</sup>** Pump - SP2600 Series Super II<sup>™</sup> Pump - SP3000 Series Max-Flo<sup>™</sup> Pump - SP2800 Series **INSTALLATION AND OPERATING INSTRUCTIONS**

Your Hayward self-priming centrifugal pump has been quality-built and engineered to give you many years of efficient, dependable, corrosionfree service.

The advanced design reduces operation and maintenance to simple, common-sense procedures.

\*This appliance is not intended for use by young children or infirm persons unless they have been adaquetly supervised by a responsible person to ensure they can use the appliance safely. \*Young children should be supervised to ensure that they do not play with the appliance.

#### **GENERAL TIPS ON PUMP INSTALLATION**

Locate the pump as close to pool as practical and r suction line as direct as possible. Secure pump to with screws or bolts to reduce vibration and pipe

Never overtighten pipe connections—use only p sealants formulated specifically for plastics, i.e., Teflo tape, Permatex No. 2, etc.

Suction line should have continuous slope from lowe point in line. Make sure suction joints are tight. Suction pipe should be as large or larger than discharge pipe.

Damp, non-ventilated locations should be avoid Motors require free circulation of air to aid in cooling.

Insure that the electrical supply available agrees wi motor's voltage and is 50 HZ, and that wire size is adequa for the KW rating and distance from power sour Motor must always be properly earthed. Electric circuits must be supplied through a Residual Curre Device - RCD (safety switch), with a rated residual operati current of 30mA. All electrical wiring must be perform by qualified electrical contractor, and must conform electrical regulations and AS3000 wiring rules.

#### STARTING AND PRIMING INSTRUCTIONS

Fill strainer/housing with water to suction pipe lev Never operate the pump without water. Water acts as coolant and lubricant for the mechanical shaft seal.

#### **IMPORTANT**

un base stress. ipe	Open all suction and discharge lines and valves, as well as air bleed (if available) on filter. (The air that is to be dis- placed from the suction line must have some place to go.)				
	CAUTION: All suction and discharge valves must be open when starting the system. Failure to do so could cause severe personal injury and/or property damage.				
est on ed.	Turn on power and allow a reasonable time for priming. Five minutes is not unreasonable. (Priming time depends on suction lift and horizontal length of suction piping.) If the pump will not start, or will not prime, see TROUBLE SHOOTING GUIDE on back page.				
	Notice for SolarApplications				
th ate ce.	A check valve must be fitted to the discharge of the pump when installed with solar system.				
ce. cal	Special Notice for 415V. 3 Phase Models				
ent ing ned to vel. s a	Only a qualified electrician may connect or disconnect this pump to/from a power supply. The motor must be connected by means of fixed wiring so that the IP rating is maintained when doing so. Electrician must check direction of rotation at time of installation. The motor is not suitable for flex and plug connection as starter/contactor with overload is required and this must be set according to the rated current.				



REF. NO.DESCRIPTION NO. REQ'D.NO. REQ'D.Model Model MF167Model MG0 MF218Model MF2581Hand Knob2SPX1600-PSPX1600-PSPX1600-P2Swivel Nut2SPX1600-NSPX1600-NSPX1600-N3Strainer Cover1SPX1250-LASPX1250-LASPX1250-LA4Strainer Cover Gasket1SPX2800-MSPX2800-MSPX2800-M5Basket1SPX2800-MSPX2800-MSPX2800-M6Drain Plug & Gasket2SPX1700-FGSPX1700-FGSPX1700-FG7Pump Housing/Strainer1SPX2800-ASPX2800-ASPX2800-A8Diffuser Gasket1SPX2800-BSPX1600-RSPX1600-R9Diffuser1SPX2800-BSPX2800-BSPX2800-B		
Image: Constraint of the systemImage: Constraint of the system1Hand Knob2SPX1600-PSPX1600-PSPX1600-PSPX1600-N2Swivel Nut2SPX1600-NSPX1600-NSPX1600-N3Strainer Cover1SPX1250-LASPX1250-LASPX1250-LA4Strainer Cover Gasket1SPX2800-MSPX2800-MSPX2800-M5Basket1SPX2800-MSPX2800-MSPX2800-M6Drain Plug & Gasket2SPX1700-FGSPX1700-FGSPX1700-FG7Pump Housing/Strainer1SPX2800-ASPX2800-ASPX2800-A8Diffuser Gasket1SPX1600-RSPX1600-RSPX1600-R		
2 Swivel Nut 2 SPX1600-N SPX1600-N SPX1600-N   3 Strainer Cover 1 SPX1250-LA SPX1250-LA SPX1250-LA   4 Strainer Cover Gasket 1 SPX0125-T SPX0125-T SPX0125-T   5 Basket 1 SPX2800-M SPX2800-M SPX2800-M   6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG   7 Pump Housing/Strainer 1 SPX2800-A SPX2800-A SPX2800-A   8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
3 Strainer Cover 1 SPX1250-LA SPX1250-LA SPX1250-LA   4 Strainer Cover Gasket 1 SPX0125-T SPX0125-T SPX0125-T   5 Basket 1 SPX2800-M SPX2800-M SPX2800-M   6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG   7 Pump Housing/Strainer 1 SPX2800-A SPX2800-A SPX2800-A   8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
4 Strainer Cover Gasket 1 SPX0125-T SPX0125-T SPX0125-T   5 Basket 1 SPX2800-M SPX2800-M SPX2800-M   6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG   7 Pump Housing/Strainer 1 SPX2800-A SPX2800-A SPX2800-A   8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
5 Basket 1 SPX2800-M SPX2800-M SPX2800-M   6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG   7 Pump Housing/Strainer 1 SPX2800-A SPX2800-A SPX2800-A   8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG   7 Pump Housing/Strainer 1 SPX2800-A SPX2800-A SPX2800-A   8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		
10 Impeller 1 SPX2607-C SPX2610-C SPX2615-C		
11 Seal Assembly 1 SPX1600-Z-2 SPX1600-Z-2 SPX1600-Z-2		
12 Housing Gasket 1 SPX1600-T SPX1600-T SPX1600-T		
13 Seal Plate 1 SPX2600-E SPX2600-E SPX2600-E   14 Motor Mounting Plate 1 SPX1600-F SPX1600-F SPX1600-F		
15 Housing Cap Screw 4 SPX1600-Z-4 SPX1600-Z-4 SPX1600-Z-4		
16 Motor Cap Screw 4 SPX125-Z-4 SPX125-Z-4 SPX125-Z-4		
17 Mounting Foot (Left) 1 SPX1600-G SPX1600-G SPX1600-G		
18 Mounting Foot (Right) 1 SPX1600-J SPX1600-J SPX1600-J   19 Mounting Foot Cap Screw 4 SPX1600-Z-5 SPX1600-Z 5 SPX1600-Z-5		
20 Slinger 1 SPX125-F SPX125-F SPX125-F		
21 Motor-240V, 50 HZ Single Phase 1 SPX2807AQM SPX2810AQM SPX2815AQM	1	
PART NUMBER		
REF. DESCRIPTION NO. MODEL MODEL MODEL MODEL		MODEL
NO. REQ'D. SP200 SP240 SP274		SP312
1 Hand Knob 2 SPX1600-P SPX1600-P SPX1600-P		SPX1600-P
2 Swivel Nut 2 SPX1600-N SPX1600-N SPX1600-N		SPX1600-N
3 Strainer Cover 1 SPX1600-D SPX1600-D SPX1600-D SPX1600-D		SPX1600-D
4 Strainer Cover Gasket 1 SPX1600-S SPX1600-S SPX1600-S   5 Basket 1 SPX1600-M SPX1600-M SPX1600-M		SPX1600-S SPX1600-M
6 Drain Plug & Gasket 2 SPX1700-FG SPX1700-FG SPX1700-FG		SPX1700-FG
7 Pump Housing/Strainer 1 SPX1620-A SPX1620-A SPX1620-A		SPX1620-A
8 Diffuser Gasket 1 SPX1600-R SPX1600-R SPX1600-R		SPX1600-R
9 Diffuser 1 SPX2600-B SPX2600-B SPX2600-B   10 Impeller 1 SPX2607-C SPX2610-C SPX2615-C		SPX1616-B SPX1621-C
It Seal Assembly 1 SPX1600-Z-2 SPX1600-Z-2 SPX1600-Z-2		SPX1621-C
12 Housing Gasket 1 SPX1600-T SPX1600-T SPX1600-T		SPX1600-T
13 Seal Plate 1 SPX2600-E SPX2600-E SPX2600-E		SPX1611-E
14 Motor Mounting Plate 1 SPX1600-F SPX1600-F SPX1600-F   15 Housing Cap Screw 4 SPX1600-Z-4 SPX1600-Z-4 SPX1600-Z-4		SPX1600-F SPX1600-Z-4
15 Housing Cap Screw 4 SPX1600-Z-4 SPX1600-Z-4 SPX1600-Z-4   16 Motor Cap Screw 4 SPX125-Z-4 SPX125-Z-4 SPX125-Z-4		SPX125-Z-4
17 Mounting Foot (Left) 1 SPX1600-G SPX1600-G SPX1600-G		SPX1600-G
18 Mounting Foot (Right) 1 SPX1600-J SPX1600-J SPX1600 J		SPX1600 J
19 Mounting Foot Cap Screw 4 SPX1600-Z-5 SPX1600-Z 5 SPX1600-Z 5   20 Slinger 1 SPX125-F SPX125-F SPX125-F		SPX1600-Z-5 SPX125-F
21 Motor – 240V, 50 HZ, Single Phase 1 SPX2607AQM SPX2610AQM SPX2615AQM	1	SPX1621AQM
21a Motor—50 HZ Single Phase (AD) 1 SPX2607ADMTR SPX2610ADMTR SPX2615ADM	R S	PX1621ADMTR
21b Motor—50 HZ Single Phase (MA) 1 SPX2607HDMTR SPX2610MAMTR SPX2615MAM	ſR	N/A
21C Motor—50 HZ Single Phase (HD) 1 SPX2607HDMTR SPX2610HDMTR SPX2615HDM	RS	PX1621HDMTR
PART NUMBER		
REF. DESCRIPTION NO. MODEL MODEL MODEL MODEL	MODEL	MODEL
NO. S2P213 S2P263 S2P316 S2P411	S2P453	S2P263E
I Hand Knob 2 SPX1600P SPX1600P SPX1600P	PX1600P	SPX1600P
	PX1600N	SPX1600N
	PX3000D	SPX3000D
	SPX3100D SPX3000S	SPX3100D SPX3000S
5 Strainer Basket 1 SPX3000N SPX3000N SPX3000N SPX3000N	PX3000N	SPX3000N
	PX1700FG	SPX1700FG
	X3020AUH X3020AA	SPX3020AUH SPX3020AA
	X3120AA	SPX3120AA
	PX1600R	SPX1600R
	SPX3021B SPX3026C	SPX3000BN SPX3010C
	PX1600Z2	SPX1600Z2
	PX3000T	SPX3000T
	SPX3020E SPX3000F	SPX3020E SPX3000F
	PX1600Z4	SPX1600Z4
16 Motor Cap Screw 4 SPX125Z4 SPX125Z4 SPX125Z4 SPX125Z4	SPX125Z4	SPX125Z4
	PX3000G	SPX3000G
18 Pump Leg Screw 2 SPX1600Z5 SPX1600Z	PX1600Z5 SPX125F	SPX1600Z5 SPX125F
	(3026AQM	N/A
20 Motor - 50HZ Single Phase - 3 Speed 1 N/A N/A N/A   av Image: Im	N/A	SPX3010ADEM
	SPX3021R XRS750JKM	SPX3005R SPXRS750JKM
N/A Union Kit - Suits Body w/o Integrated Union 1 UN5050 UN5050 UN5050 UN5050	UN5050	N/A

# ⊖ HAYWARD<sup>®</sup> Super II<sup>™</sup> Pump

## **3 SPEED OPERATION**

### WORLD LEADING 7 STAR ENERGY EFFICIENCY

Hayward 3 Speed Pumps incorporate Superior Wet End Design characteristics, providing Industry Leading Performance and Energy Savings that allow Hayward Pumps to out perform and out last most competitors with ease.

#### **REDUCES ENERGY CONSUMPTION AND OPERATING COST**

By reducing the speed of the pump motor, and in turn the flow rate of water through the plumbing and filtation system, friction losses are minimized resulting in a need for much less expensive energy to circulate and filter the water. In Fact a reduction of 50% in Pump Speed will reduce power consumption by UP TO 75%!

#### **IMPROVED WATER QUALITY**

In addition to lower operating costs, a reduction in flow rate has the potential to improve the water quality in most installtions. At reduced flow rates the capacity of media such as Sand, Glass and Zeolite, will actually improve allowing it to trap and retain finer particals than at higher flow rates.

#### FLEXIBILTY OF 3 SPEEDS

Hayward 3 Speed Pumps have been designed to provide an appropriate setting to suit various functions and installation requirements. For most private pools of up to 50,000 litres low speed will provide sufficent pefformance to meet daily filtation needs. Higher speed may be selected In times of abnormal or increased demand ensuring optimum performance at all times, as well as for backwashing, or media filters, or operation of water features.

### SELECTING THE CORRECT SPEED SETTING

To maximise efficiency and peformance it is important to select the approporiate speed setting for your specific requirements. Following is an operation guide, please consult a pool professional for correct sizing, model selection, and installation advice.

**Filter (Low Speed)** - This speed will meet the daily requirements for most private use pools up to 50,000 litres and will reduce your filtration operation cost over an 8 hour period by around 75% compared to a normal single speed pump. Average will provide a turnover rate of 1.24 times the entire pool volume in an average days operation.

**Boost (Medium Speed)** - This speed can be used for operation of Automatic Pool Cleaners or to increase flow, to the equivilant of a larger pump, for operation of pool accessories other than filtration.

**Turbo (High Speed)** - Designed for backwashing and operation of accessories that may require extra flow for specific functions, such as Spa Jets and Water Features.

Boost and Turbo could also be selected for periods of increased pool usage and filtration demand or for when used to filter larger volumes of water.

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