

# PETROL WATER PUMPS

**OPERATOR'S MANUAL** 



MODELS: TM530-050, TM530-080 & TM530-250



TO PREVENT SERIOUS INJURY OR DAMAGE TO YOUR WATER PUMP, READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USE



Ver: 1.4



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#### LIMITED WARRANTY

Industrial Tool & Machinery Sales (hereinafter referred to as ITMS) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.

PRODUCTS IMPORTED AND DISTRIBUTED NATIONALLY BY:



#### INDUSTRIAL TOOL & MACHINERY SALES

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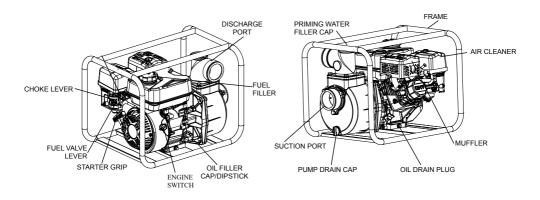
# **PRODUCT SPECIFICATIONS**

Thank you for purchasing your ITM Petrol Water Pump.

Please read and understand the content of this manual for safety guidelines, start-up, priming, operation, adjustment and maintenance instructions before using this product. Take all possible precautions to protect your own safety and that of the people in the immediate vicinity.

Save this manual for future reference.

MODEL	TM530-050	TM530-250	TM530-080
Engine Model	4 Stroke OHV	4 Stroke OHV	4 Stroke OHV
Engine Output Power	7HP	7HP	7HP
Engine Displacement (cc)	212	212	212
Impeller	Single	Double	Single
Max Flow Rate (L/hr)	28,000	17,000	60,000
Max Flow Rate (L/min)	466	283	1000
Max Lift (total head)	32m	80m	25m
Max Suction	7.5m	7m	7m
Input Diameter	50mm	50mm	80mm
Output Diameter	50mm	50mm / 38mm	80mm
Fuel Tank Capacity (L)	3.6	3.6	3.6
Oil Capacity (L)	0.6	0.6	0.6
Warranty	2 Year	2 Year	2 Year





## **GENERAL SAFETY RULES**

Before operating, ensure you have read and understood the manual and operational procedures to help reduce the risk of damage to your product as well as potential personal injury.

Before operating, perform the pre-operation inspection to make the use of your water pump safe.

Under no circumstances should you use your pump for flammable or corrosive liquids (such as petrol or acid). To prolong the life of your water pump, do not use for corrosive liquids such as salt water, chemical solutions or alkaline liquids.

Locate the water pump on a firm and level ground, a slopped or overturned water pump may result in the spilling of oil and fuel.

Always operate your pump outdoors in a well ventilated area away from any potentially flammable or hazardous material. NEVER run your water pump indoors or in a shed, exhaust emissions from the engine contain toxic carbon monoxide (CO) which can lead to death if inhaled.

Keep children and pets away from the pump when in use.

Always fill the petrol tank with the water pump turned off and in a well ventilated area. After filling, ensure the fuel cap is tightened correctly and you wipe any excess/spilled fuel from the top of the fuel tank.



### **GETTING STARTED**

#### CONNECTING WATER INLET HOSE

Always use a quality inlet hose with reinforced construction to prevent hose collapse, the hose must be a continuous hose with no joins or kinks and should be fully unrolled. NOTE: Suction and priming times will vary depending on the length of the inlet hose and the height of the pump from the water source Prior to priming the pump, ALWAYS ensure the pre-filter is connected to the end of the water inlet hose. The filter will catch large particles that may jam and damage the pump impellers. Be sure to install hose clamps tightly to prevent air leaks which will reduce the pumps performance.

#### CONNECTING WATER OUTLET HOSE

Always use a quality outlet hose designed to be used with the same outlet size of the pump. Runnings and smaller diameter hose that the outlet of the pump will increase flow resistance and decrease the power output and flow rate of your pump.

Note: Securely tighten the hose clamps to ensure the hose does not blow off when under pressure.

SAE Viscosity Grades

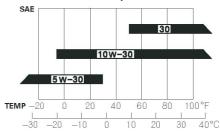
#### **ENGINE OIL LEVEL CHECK**

Using quality engine oil is key to the ongoing performance of your engine, always use the specified oil for your Engine.

SAE 10W-30 is recommended for general use.

Other viscosities shown in the chart may be

SAE 10W-30 is recommended for general use Other viscosities shown in the chart may be used when the average temperature in your area is within the recommended range.



AMBIENT TEMPERATURE

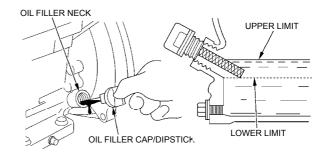
Engine oil capacity: 600ml

NOTE: The engine has a low oil sensor which prevents the engine from running with not enough oil in the crankcase. The oil alert system will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before start-up.

#### **FUEL LEVEL CHECK**

The engine is certified to operate on unleaded fuel with a research octane rating of 91 or higher (a pump octane rating of 86 or higher). You may use unleased fuel containing no more than 10% ethanol (E10).

Always check the fuel level prior to starting the engine. With the engine stopped and on a level surface, remove the fuel cap and check the fuel level and refill if too low. Fill to the maximum level of the fuel tank. DO NOT overfill





## **OPERATION**

#### CONNECTING THE HOSES

NOTE: Always use a commercially suitable hose and hose connector with the hose clamp provided with the pump. The suction hose must be reinforced with a non-collapsible wall or braided wire construction.

Do not use a hose smaller than the pump's suction port size. Minimum hose size:

TM530-050 50mm (2") TM530-250 50mm (2") TM530-080 80mm (3")

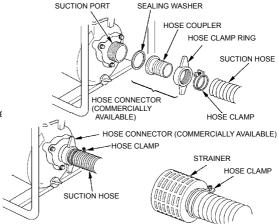
The suction hose should be no longer than necessary. Pump performance is best when the pump is near the water level and the hoses are short.

Use a hose clamp to securely fasten the hose connector to the suction hose in order to prevent air leakage and loss of suction. Verify that the hose connector sealing washer is in good condition prior to connection.

Install the strainer (provided with the pump) on the other end of the suction hose and secure it with a hose clamp. The strainer will help to prevent the pump from becoming clogged or damaged by debris.

Securely tighten the hose connector on the pump suction port

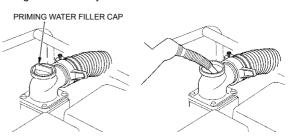
Connect the discharge hose by tighten the hose clamp securely to prevent the discharge hose from disconnecting under pressure.



#### PRIMING THE PUMP

Before starting the engine, remove the filler cap from the pump chamber, and completely fill the pump chamber with water. Reinstall the filler cap, and tighten it securely.

NOTE: Operating the pump dry will destroy the pump seal. If the pump has been operated dry, stop the engine immediately, and allow the pump to cool before priming.





#### STARTING THE WATER PUMP

CAUTION: Improperly maintaining this pump or failing to correct a problem before operation could cause a malfunction in which you could be injured or your pump could be seriously damaged. Always perform an inspection prior to each use an correct any potential issue.

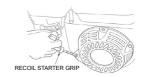
- 1. Move the fuel valve lever to the ON position.
- To start a cold engine, move the choke lever to the CLOSED position.To restart a warm engine, leave the choke lever in the OPEN position.



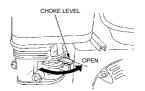
3. Turn the ignition switch to the ON position.



Pull the recoil starter grip lightly until resistance is felt, then
pull it briskly. Do not allow the recoil starter grip to snap back
against the engine. Return it gently to prevent damage to
the starter.



 If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.

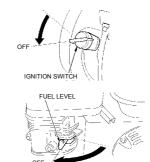




#### STOPPING THE WATER PUMP

1. Turn the ignition switch to the OFF position.





PUMP

DRAIN

Debris and dirt deposits can build up on the inside of the water pump housing, such deposits may remain inside after use and reduce the performance of the pump and cause damage to the impeller.

After each use, remove the drain plug from the bottom of the pump chamber and allow water to drain. Remove the filler cap, and flush the pump chamber with clean, fresh water while the drain plug is removed. Allow the water to completely drain from the pump chamber, then reinstall the filler cap and drain plug prior to storage.

# IMPORTANT: IT IS RECOMMENDED THAT YOU COMPLETELY DRAIN THE FUEL TANK AND CARBURETOR PRIOR TO STORING YOUR WATER PUMP FOR EXTENDED PERIODS

Fuel will oxidize and deteriorate in storage. Old fuel will leave gum deposits that clog the fuel system and makes future starting very difficult. If the fuel in your engine deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that fuel can be left in the tank and carburetor without causing functional problems will vary with such factors as fuel blend, your storage temperatures and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration.

Very warm storage/temperatures accelerate fuel deterioration. Fuel deterioration problems may occur

within a few months or even less if the fuel was not fresh when you filled the fuel tank.

The Manufacturers Warranty DOES NOT cover fuel system damage or engine performance problems resulting from neglected storage preparation.

You can extend fuel storage life by adding a fuel stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburettor after each use prior to storage.

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# **MAINTENANCE**

To keep the water pump at optimal performance, checking over it periodically and regular maintenance and service will extend it service life.

NOTE: Before performing any maintenance to the water pump, ensure the engine is stopped and turned off.

#### **MAINTENANCE SCHEDULE**

ITEM		BEFORE USE	1 MONTH OR 20 Hr	3 MONTH OR 20 Hr	6 MONTH OR 100Hr	12 MONTH OR 300 Hr
Engino Oil	Level	✓				
Engine Oil	Change		✓		✓	
Air Classer	Level	✓				
Air Cleaner	Clean				✓	
Spark Plug				✓		✓
Valve Clearance		<b>√</b>		✓		
Combustion		Every 500 Hours				
Spark Eliminator		Every 100 Hours				
Fuel Line		Every 1 Year				
Impeller Check		<b>√</b>		✓		
Water Pump Tank		<b>√</b>		✓		
Water Inlet Valve Check		1		✓		

Use of the water pump in extremely dusty conditions means it should be serviced more frequently. All servicing of the engine and pump should be done by an authorised dealer who has the correct tools and is qualified mechanically.

For any engine maintenance, please refer to the Honda Engine owners manual for all relevant service and maintenance information.



# **TROUBLE SHOOTING**

# **ENGINE**

Engine Will Not Start	Possible Cause	Correction
1.Check control positions.	Fuel valve OFF.	Move fuel valve lever to ON position.
	Choke open.	Move choke lever to CLOSED position unless engine is warm.
	Ignition switch OFF.	Turn ignition switch to ON.
2. Check fuel.	Out of fuel.	Refuel
	Bad fuel; pump stored without treating or draining gasoline, or refuel with bad gasoline.	Drain fuel tank and carburetor. Refuel with fresh gasoline
3. Remove and inspect spark	Spark plug faulty, fouled, or improperly gapped.	Gap or replace spark plug
plug.	Spark plug wet with fuel (flooded engine).	Dry and reinstall spark plug.
4. Take engine to an authorized servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

Engine Lacks Power	Possible Cause	Correction
1. Check air filter.	Air filter clogged.	Clean or replace filter.
2. Check fuel.	Bad fuel; pump stored without treating or draining petrol, or refuel with bad petrol.	Drain fuel tank and carburetor. Refuel with fresh petrol.
3. Take engine to an authorised servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.



# **TROUBLE SHOOTING**

#### **PUMP**

No Pump Output	Possible Cause	Correction
1. Check pump chamber.	Pump not primed.	Prime the pump
2. Check suction hose.	Hose collapsed, cut or punctured.	Replace suction hose
	Strainer not completely underwater.	Sink the strainer and the end of a suction hose completely underwater.
	Air leak at connector.	Replace sealing washer if missing or damaged. Tighten hose connector and clamp
	Strainer clogged.	Clean debris from strainer.
Measure suction and discharge head.	Excessive head.	Relocate pump and/or hoses to reduce head
4. Check engine.	Engine lacks power.	

Low Pump Output	Possible Cause	Correction
1. Check suction hose.	Hose collapsed, damaged, too long, or diameter too small.	Sink the strainer and the end of a suction hose completely underwater.
	Air leak at connector.	Sink the strainer and the end of a suction hose completely underwater.
	Strainer clogged.	Clean debris from strainer.
2. Check discharge hose.	Hose damaged, too long, or diameter too small.	Replace discharge hose
3. Measure suction and discharge head.	Marginal head.	Relocate pump and/or hoses to reduce head
4. Check engine.	Engine lacks power.	