

#### **DUROMAX WATER PUMPS**

USER MANUAL



REV: XPxxxWP\_rev06082022

This manual provides information regarding the operation and maintenance of these products. We have made every effort to ensure the accuracy of the information in this manual. We reserve the right to change this product at any time without prior notice. 5800 Ontario Mills Pkwy Ontario, CA 91764 USA www.duromaxpower.com Call our Customer Care Team Toll Free 8-5 pm PST Mon-Fri

844-DUROMAX

# 

1.	Introduction	
	Introduction	,
	General Safety Procedures	,
	Unit and Purchase Information <b>12</b>	
	Package Contents 13	;
	Water Pump Components 14	•
2.	Water Pump Setup	
	Adding Oil 18	,
	Adding Gasoline 19	)
3.	Starting the Water Pump	
	Check the Oil	,
	Check the Gas Level	,
	Choose the Right Suction and Discharge Hose 24	ŀ
	Prime the Water Pump 25	)
	Starting the Water Pump 26	)
4.	Maintenance and Care	
	Maintenance Schedule	)
	Break-In Period 31	
	Maintenance Log	
	Checking the Oil	•
	Changing the Oil	,
	Changing the Air Filter 34	r
	Spark Plug Maintenance 36	,
	Spark Plug Maintenance 36 Emptying the Gas Tank	
		\$
	Emptying the Gas Tank	)
	Emptying the Gas Tank	)
	Emptying the Gas Tank38Storing the Water Pump for Same Day Use40Storing the Water Pump for Use Within 30 Days41	<u>)</u>
5.	Emptying the Gas Tank38Storing the Water Pump for Same Day Use40Storing the Water Pump for Use Within 30 Days41Storing the Water Pump for Longer Than 30 Days42	<u>)</u>

## **CONTENTS**

6.	Warranty50
7	Contact Information 54

For more information and resources on this model scan the QR code below to link to our website product information page.





POWERING EVERYONE... ANYWHERE!



#### THE DUROMAX WAY

The DuroMax Way is more than just a brand, it is our understanding and appreciation of just how important power can be to someone without it...



#### **DUROMAX FOR HOME**

Electricity in our home not only provides comfort but safety as well. From keeping the heat or A/C on to keeping our food cold, power is essential to our daily lives. Inevitability when disaster strikes and we are left without power for a prolonged period of time, our way of life is put at risk. This is by far the most critical time for reliable portable power.



**DUROMAX FOR WORK** 

On the job site, portable power allows you the ability to get work done in remote locations when traditional power sources are usually unavailable. Equipment like table saws, sanders, and work lights are a necessities and portable power can play a critical role in getting a job done successfully and efficiently.



#### **DUROMAX FOR PLAY**

Camping outdoors in a remote location can get one in touch with nature and allow them to forget the stress of the day-to-day grind. Here, portable power can provide comfort as well as safety. With portable power, you can keep your cellphone charged, light up your campsite, or even brew a cup of coffee, all while being miles from civilization..

**The DuroMax Way is a commitment to excellence.** This vision is focused on the quality, reliability, and durability of our products combined with outstanding customer service. We understand that having dependable power whenever and wherever you need it provides comfort, safety, and peace of mind. It is through this philosophy that DuroMax achieves our vision of...

# POWERING EVERYONE... ANYWHERE!

# INTRODUCTION

DuroMax Power Equipment is headquartered in Ontario, California and is the industry's leader in dual fuel portable water pump technology. In addition to a full assortment of generators ranging from digital inverters to large 15,000-watt portable standby units, our product line includes pressure washers, engines, pumps, and accessories.

The foundation of our company is built on quality, reliability, durability, and customer service. At DuroMax our vision is simple, we are committed to Powering Everyone... Anywhere!



#### **Notice Regarding Emissions**

Engines that are certified to comply with U.S. EPA emission regulations for SORE (Small Off-Road Equipment), are certified to operate on regular unleaded gasoline and may include the following emission control systems: (EM) Engine Modifications and (TWC) Three-Way Catalyst (if so equipped).

# **GENERAL SAFETY PROCEDURES**



#### **SAFETY ALERT SYMBOL**

The safety alert symbol is used with one of the safety words (**DANGER**, **WARNING**, or **CAUTION**) to alert you of hazards. Please pay attention to these hazard notices both in this manual and on the engine.

#### Please familiarize yourself with the following safety symbols and words:

- **DANGER**: Indicates a hazard that will result in serious injury or death if instructions are not followed.
- **WARNING**: Indicates a strong possibility of causing serious injury or death if instructions are not followed.
- **CAUTION**: Indicates a possibility of personal injury or equipment damage if instructions are not followed.



**DANGER:** This water pump produces poisonous carbon monoxide gas when running. This gas is both odorless and colorless. Even if you do not see or smell gas, carbon monoxide may still be present. Breathing this poison can lead to headaches, dizziness, drowsiness, and eventually death.

- Use outdoors ONLY in non-confined areas.
- Keep several feet of clearance on all sides to allow proper ventilation of the water pump.



**WARNING:** The exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



**WARNING:** This water pump produces heat when running. Temperatures near exhaust can exceed 150°F (65°C).

- Do not touch hot surfaces. Pay attention to warning labels on the water pump denoting hot parts of the machine.
- Allow water pump to cool several minutes after use before touching engine or areas which heat during use.



**WARNING:** This water pump may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact with gasoline.

- Do not operate near an open flame.
- Do not smoke near the water pump.
- Always operate on a firm, level surface.
- Always turn the water pump off before refueling.
- Allow water pump to cool for at least 2 minutes before removing the fuel cap. Loosen cap slowly to relieve pressure in the tank.
- Do not overfill the gas tank. Gas may expand during operation. Do not fill to the top of the tank.
- Always check for spilled gas before operating.
- Empty the gasoline tank before storing or transporting the water pump.
- Before transporting, turn the fuel valve to the off position and disconnect the spark plug.

# **GENERAL SAFETY PROCEDURES (CONTINUED)**

In addition to the above safety notices, please familiarize yourself with the safety and hazard markings on the water pump.



#### 🛕 DANGER

Using power equipment indoors CAN KILL YOU IN MINUTES.

Power equipment exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.



Only use OUTSIDE and far away from windows, doors, and vents.







Check that there is no fuel spillage or fuel leakage.

Engine must be off before fueling.

# **UNIT AND PURCHASE INFORMATION**

#### **Serial Number**



#### Serial number

The serial number is located on the engine block, above and to the left of the oil fill.



#### Serial number format

The serial number will be shown in two parts. The engine model, followed by the serial number.

Engine Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

#### **STAPLE RECEIPT HERE**

A purchase receipt may be necessary for warranty parts or service in the future. If you have a paper receipt, staple it here for easy reference.

If you purchased the unit online, save the email receipt where you can access it, and record your details here for convenience in the future.

Purchase Date: \_\_\_\_\_

Order Number:

Retailer Name: \_\_\_\_\_

# **PACKAGE CONTENTS**

Your water pump comes with the items listed below. Please check to see that all of the following items are included with your water pump.







#### er Spark Plug Wrench

Used in spark plug maintenance, inspection, and installation.



Used to add oil to the water pump without messy spills.



Assorted wrenches used in water pump maintenance and assembly. 10mm/12mm, 13mm/15mm, and 17mm/19mm.





Strainer

Used to help catch solid debris prior to entering the water pump.



#### **Hose Connectors & Clamps**

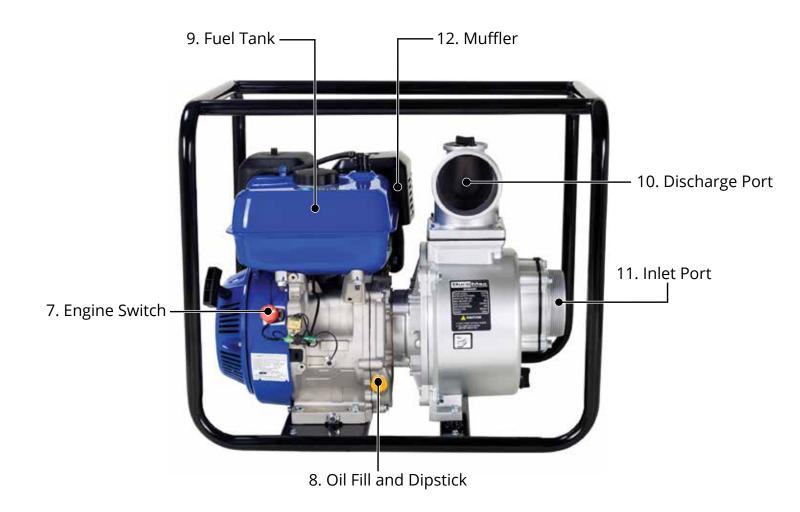
Used to secure the intake and discharge hose to the water pump.

• Note: Actual tools may differ in appearance or design from the image shown.

# WATER PUMP COMPONENTS



- 1. **Air Cleaner** A removable, cleanable, oiled, element that cleans the air going into the engine.
- 2. **Choke** An ON/OFF choke lever that controls the fuel air mixture.
- 3. **Fuel Valve** An ON/OFF valve that allows gasoline to the fuel switch.
- 4. **Recoil Start** Easy pull recoil start to start the engine.
- 5. **Throttle Lever** A throttle lever that controls the engine speed.
- 6. **Recoil Handle** Easy pull recoil handle used to engage the recoil start and start the engine.



- 7. Engine Switch An easy to use switch used to turn the water pump ON or OFF.
- 8. **Oil Fill and Dipstick** Use to add or check the oil.
- 9. Fuel Tank All metal gasoline fuel tank.
- 10. **Discharge Port** A discharge port used for attaching the discharge hose.
- 11. **Inlet Port** An inlet port used for attaching the suction hose.
- 12. **Muffler -** A noise dampening component that helps lower the engine decibel level.



POWERING EVERYONE... ANYWHERE!



# WATER PUMP SETUP

Proper setup of your water pump will get you going as soon as possible while making sure you and your equipment are safe and cared for.

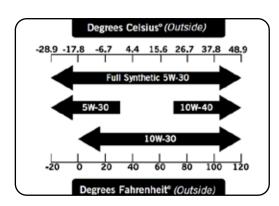
# WATER PUMP SETUP

# Step 1 - Adding Oil

The water pump requires engine oil to operate properly. The water pump, when new from the package, contains no oil in the crankcase<sup>\*</sup>. You must add the proper amount of oil before operating the water pump for the first time. This amount is equal to the oil capacity of the engine crankcase:

Model Number XP652WP		XP650WP	XP904WP
Engine Oil Capacity	20 fl. oz. (0.6 L)	20 fl. oz. (0.6 L)	37.2 fl. oz. (1.1 L)

WARNING: Do not apply engine oils with additives or 2-stroke gasoline engine oils; they don't have enough lubrication and may shorten the engine's service life.



#### Engine oil recommended: SAE 10W-30.

Viscosity varies with regions and temperatures. Choose your oil viscosity using the chart to the left.

\* A small amount of oil from factory testing may be present on arrival.

\* Synthetic oil may be used after the 8 hour initial break-in period. Using synthetic oil does not increase the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold temperatures <5°C (41°F).





#### Add oil

- a. Make sure the water pump is on a level surface.
- b. Unscrew the oil filler/dipstick cap from the engine.
- c. Using a funnel, add the appropriate amount of oil into the crankcase. You will know the crankcase is full when the oil level has reached the lower lip of the opening you have just poured the oil into.
- d. Replace the oil filler cap.



WARNING: DO NOT overfill the crankcase. This may damage the motor and shorten the overall life of your water pump.

#### Step 2 - Adding Gasoline



#### Add gasoline

- a. Make sure the water pump is on a level surface.
- b. Unscrew gas cap and set aside (NOTE: the gas cap may be tight and hard to unscrew).
- c. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. The fuel gauge on the top of the gas tank indicates how much gasoline is in the water pump gas tank.
- d. Replace fuel cap and wipe up any spilled gasoline with a dry cloth.

Model Number XP652WP		XP650WP	XP904WP
Fuel Capacity	1 US gal	1 US gal	1.7 US gal





WARNING: Gas can expand. Do not fill the gas tank to the very top. Leave a minimum of 1.5 in open space. Gasoline and gas fumes are highly flammable. Do not fill the tank near an open flame. Always check for fuel spills.

#### **IMPORTANT:**

- To ensure that the engine runs smoothly use only FRESH, UNLEADED GAS WITH AN OCTANE RATING OF 87 OR HIGHER.
- Never use an oil/gasoline mixture. Never use old gas.
- Avoid getting dirt or water in the fuel tank.
- Gas can age in the tank and make it hard to start up the water pump in the future.
- Never store water pump for extended periods of time with fuel in the tank.



POWERING EVERYONE... ANYWHERE!



# **STARTING THE WATER PUMP**

If this is not your first time using the water pump, there are still steps you should take to prepare it for operation each time you use it.

IMPORTANT: At this point, you should be familiar with the procedures described in the first portion of this section entitled "WATER PUMP SETUP". If you have not yet read this section, go back and read it now.

# **BEFORE YOU START YOUR WATER PUMP**

#### **Check the Oil**



### Check the oil

The water pump is equipped with an automatic shutoff to protect it from damage due to low oil. Nonetheless, you should check the oil level of the engine before each use to ensure that the engine crankcase has a sufficient amount.

To check the oil level:

- a. Make sure the water pump is on a level surface.
- b. Unscrew the oil filler/dipstick cap.
- c. With a dry cloth, wipe the oil off of the stick on the inside of the cap.
- d. Insert the dipstick as if you were replacing the cap and then remove it again. There should now be oil on the stick. If there is no oil on the stick, or oil only at the very end of the stick, you should add oil until the engine crankcase is filled (see "Adding Oil" portion of the "Maintenance" section).
- e. Be sure to replace the cap when finished checking oil.

Model Number	XP652WP	XP650WP	XP904WP
Engine Oil Capacity	20 fl. oz. (0.6L)	20 fl. oz. (0.6L)	37.2 fl. oz. (1.1L)



#### **Check the Gas Level**



#### **Check fuel level**

If running the engine on gasoline check to see that there is sufficient gasoline in the fuel tank. The gasoline level should always be under the red fuel level indicator located on the bottom of the fuel filter cup.





#### WARNING: Gasoline and gasoline fumes are highly flammable.

- Do not fill the tank near an open flame.
- Always allow the engine to cool for several minutes before refueling.
- DO NOT overfill the fuel tank. Fuel expands when shaken or heated. ALWAYS leave  $1^{1}/_{2}$ " space or more at the top of the tank.
- ALWAYS use fresh fuel or stabilized fuel. Old gasoline (older than 30 days) can cause permanent damage to the fuel system.
- Always check for fuel spills.

# **BEFORE YOU START YOUR WATER PUMP**

#### **Choose the Right Suction and Discharge Hose**

The water pump should have the appropriate discharge and suction hose attached based on model size. Please see the tables below for current models of DuroMax suction and discharge hoses.

Model Number	Model Number XP652WP		XP904WP
Hose Diameter	2″	3″	4″

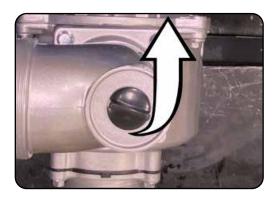


Length		Suction Hose Diameter	
Lengen	2" Suction Hose	3" Suction Hose	4" Suction Hose
10 ft	XPH0210S	XPH0310S	XPH0410S
20 ft	XPH0220S	XPH0320S	XPH0420S



Length		Discharge Hose Diameter	
Lengen	2" Discharge Hose	3" Discharge Hose	4" Discharge Hose
25 ft	XPH0225D	XPH0325D	XPH0425D
50 ft	XPH0250D	XPH0350D	XPH0450D

#### **Prime the Water Pump**



#### 1. Remove priming port plug

Unscrew the priming port plug located on the top of the discharge port.



### 2. Fill the priming port with water

Fill up priming port with water until the water pump case is full.



#### 3. Fill the suction hose with water

Fill the suction hose with water until full to finish priming the pump. **NOTE:** If the suction hose is on a steep incline its recommended to attach a check valve to the hose to allow easier priming.



**CAUTION**: Do not attempt to start pump without priming first. Attempting to start the pump without priming can damage the internal parts of the pump.

# **STARTING THE WATER PUMP**

#### **Starting the Water Pump**



#### 1. Move gas fuel valve to ON

The gas valve is located above the carburetor bowl. Move the gasoline fuel valve lever all the way to the right-hand position to allow gasoline to flow to the engine carburetor.



#### 2. Move choke lever ON

The choke lever is located above the gas valve. Move the choke lever to the left-hand side to the "ON" position to start. Please note that if the engine is hot, turning the choke on is unnecessary.



#### 3. Adjust the throttle lever

The throttle lever is located above and to the right of the choke lever. Adjust the throttle lever to the low speed position.



#### 4. Turn switch ON

Turn the engine switch to the "ON" position.



## 5. Pull the recoil start handle

Pull the recoil handle slowly until resistance is felt, then quickly pull the recoil handle until fully extended. Continue this step until the engine starts as needed.



**CAUTION:** Release the recoil handle only after the cord has retracted. Releasing the recoil handle while extended may cause harm to yourself or your equipment.



#### 6. Move the choke lever to RUN

After allowing the engine to preheat, move the choke lever to the right-hand side to the "RUN" position to steady the idle speed and run the engine.



## 7. Adjust the throttle lever

Adjust the throttle lever to the proper position for the desired speed and the engine is ready for use.



POWERING EVERYONE... ANYWHERE!



# MAINTENANCE AND CARE

Proper maintenance and storage of your water pump is essential to ensure trouble free use of your water pump when you need it.

By following the maintenance and care requirements, you can keep your engine running smooth and efficient for years to come.

# **MAINTENANCE AND CARE**

Proper routine maintenance of your water pump is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.



WARNING: Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously injured or killed. Always follow the inspection, maintenance recommendations, and schedules in this instruction manual.

- Make sure the engine is off before you begin any maintenance or repairs.
- Let the engine and exhaust system cool before touching.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

#### **Maintenance Schedule**

Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load, high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

SERVICE	EVERY USE	1ST MO. OR 8 HRS. (BREAK IN)	EVERY 3 MO. OR 50 HRS. OF HEAVY USE	EVERY 6 MO. OR 100 HRS. OF NORMAL USE	EVERY 12 MO. OR 300 HRS.	EVERY 3 YRS. OR 500 HRS.
ENGINE OIL	CHECK	CHANGE	CHANGE	CHANGE		
AIR CLEANER	СНЕСК	CHECK	CHANGE	CHANGE		
SPARK PLUG			CLEAN /	CLEAN /		
			ADJUST	ADJUST		
SPARK ARRESTOR	CHECK				CLEAN	
IDLE SPEED					CHECK / ADJUST	
VALVE CLEARANCE					CHECK / ADJUST	
FUEL TUBE	СНЕСК				CHECK / REPLACE	
FUEL TANK / FILTER					CLEAN	
COMBUSTION CHAMBER						CLEAN

### **Break-In Period**

#### As the best practice for any new combustion motor it's recommended to perform the break in procedure as follows:

- Run the engine for the first 6-8 hours on conventional oil, then change the oil. After the break-in period synthetic oil may be used.
- During the break in period of the first 6-8 hours keep the engine speed under 50% for optimal results.
- Check and clean the air filter if necessary after the break-in period.

#### **Maintenance Log**

As a best practice it's recommended to keep a log of the engine hours and maintenance to ensure your water pump is always operating to its full potential.

Date	Engine Hours	Maintenance Performed

# **MAINTENANCE AND CARE (CONTINUED)**

## **Checking the Oil**



## Check the oil

The engine is equipped with an automatic shutoff to protect it from damage due to low oil. Nonetheless, you should check the oil level of the engine before each use to ensure that the engine crankcase has a sufficient amount.

To check the oil level:

- a. Make sure the engine is on a level surface.
- b. Unscrew the oil filler/dipstick cap.
- c. With a dry cloth, wipe the oil off of the stick on the inside of the cap.
- d. Insert the dipstick as if you were replacing the cap and then remove it again. There should now be oil on the stick. If there is no oil on the stick, or oil only at the very end of the stick, you should add oil until the engine crankcase is filled (see "Adding Oil" portion of the "Maintenance" section).
- e. The oil will be visible in the oil fill spout when full.
- f. Be sure to replace the cap when finished checking oil.

Model Number	XP652WP	XP650WP	XP904WP
Engine Oil Capacity	20 fl. oz. (0.6 L)	20 fl. oz. (0.6 L)	37.2 fl. oz. (1.1 L)



#### **Changing the Oil**





**CAUTION:** Worn out or dirty oil does not cool the engine properly and can lead to catastrophic engine damage.

In addition to regular oil changes, it is necessary to drain the oil from the crankcase if it has become contaminated with water or dirt.



#### 1. Remove drain plug

Using a 12 mm hex wrench, unscrew the oil drain plug, which is located on the crankcase underneath the oil filler/dipstick cap.

Allow all the oil to drain from the engine.



## 2. Drain oil

Drain oil into an approved oil disposal container. Contact your local auto parts store for information on oil disposal.



#### 3. Replace drain plug

Replace the oil drain plug and tighten with a 12 mm hex wrench.

# **MAINTENANCE AND CARE (CONTINUED)**

#### **Changing the Air Filter**

#### **MAINTAIN AIR FILTER**

Clean air filter after every 50 hours of use (every 10 hours in unusually dusty conditions) Wash filter element with household detergents. Wipe out dust from air filter housing before replacing filter element.

Never clean with a brush

Routine maintenance of the air cleaner helps maintain proper airflow to the carburetor. Check that the air cleaner is free of excessive dirt after every use.

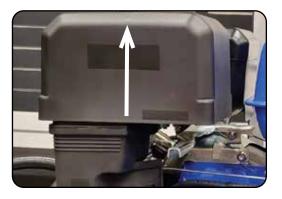


**CAUTION:** Improper maintenance may cause less air to enter the engine or dirty air to enter the engine causing overheating and engine wear.



#### 1. Remove filter cover wing nut

Remove the wing nut located on the top of the air filter cover.



## 2. Remove filter cover

Remove the plastic air filter cover by lifting the cover upwards to expose the air filter element.



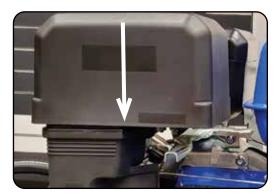
#### 3. Remove old filter element

Remove the wing nut on top of the air filter element and slide filter element off center bolt. This filter is paper and is not reusable. Please call 1-844-DUROMAX to order a replacement filter for your engine.



## 4. Replace new filter element

Slide new filter element over center bolt, and replace wing nut. Tighten wing nut hand tight to keep filter in place.



## **5.** Replace filter cover

Replace plastic air filter cover over the air filter base.



## 6. Secure filter cover

Fasten the air filter cover with the air filter cover wing nut and tighten about hand tight.

# **MAINTENANCE AND CARE (CONTINUED)**

### **Spark Plug Maintenance**



The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped.



**CAUTION:** Improper maintenance may cause reduced fuel economy, misfires, trouble starting, or damage to the spark plug threads.



#### 1. Remove spark plug cap

Pull on the spark plug cap to remove it.



# 2. Remove spark plug

Unscrew the spark plug from the engine using the spark plug wrench included with this product.



## 3. Inspect spark plug

Visually inspect the spark plug. If it is cracked or chipped, discard and replace it with a new spark plug. We recommend using an F6RTC spark plug such as NGK BPR6ES.



## 4. Measure plug gap

Measure the plug gap with a gauge. The gap should be 0.7-0.8 mm (0.028-0.031 in).



## 5. Clean and re-gap

If you are re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.



# 6. Install spark plug

Screw the spark plug back into its place on the engine using the spark plug wrench.



# 7. Replace spark plug cap

Replace the spark plug cap.

# **MAINTENANCE AND CARE (CONTINUED)**

#### **Emptying the Gas Tank**



If you have been using gasoline in your water pump, before storing your water pump for extended periods of time you should drain your engine fuel tank of gasoline.

CAUTION: Do not store fuel from one season to another. Gasoline sold at the pump today contains additives such as ethanol that even when stored properly may damage the fuel system components.



#### 1. Shut fuel valve OFF

Turn the fuel valve to the "OFF" position.



# 2. Remove carburetor drain bolt

Remove the outward angled bolt that is located on the bottom of the carburetor.



## 3. Place funnel below drain port

Place funnel with container to catch the gasoline under the drain port location.



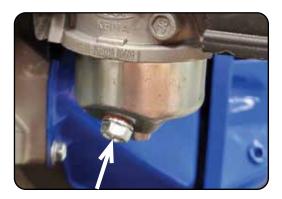
# 4. Turn fuel valve ON and drain

Turn the fuel valve to "ON" and allow gasoline to drain into the container until the gas tank is empty.



## 5. Shut fuel valve OFF

Once the gasoline is fully drained, move the fuel valve back to the "OFF" position.



# 6. Replace carburetor drain bolt

Reinstall the carburetor drain bolt.



# 7. Store emptied gasoline

Store the emptied gasoline in a suitable place and add fuel stabilizer to keep fuel fresh and usable.

# **MAINTENANCE AND CARE (CONTINUED)**

### Storing the Water Pump for Same Day Use



### 1. Run the water pump

Allow the engine to run for 3-5 minutes.



## 2. Turn engine switch to OFF

Move the engine switch to the "OFF" position to shut the engine off.



### 3. Store water pump

After the engine shuts off and cools, then you can store the water pump.



**CAUTION**: Do not obstruct any ventilation openings and keep the water pump in a cool dry area.

### Storing the Water Pump for Use Within 30 Days



#### 1. Run the water pump

Allow the engine to run for 3-5 minutes.



## 2. Shut fuel valve OFF and run dry

Shut the fuel valve "OFF" and allow engine to run until it stalls out.



# 3. Turn the engine switch OFF

Move the engine switch to the "OFF" position to shut the engine off.



### 4. Add fuel stabilizer and store

Add fuel stabilizer to gas remaining in tank, and store the water pump.

# **MAINTENANCE AND CARE (CONTINUED)**

### Storing the Water Pump for Longer Than 30 Days



#### 1. Run the water pump

Allow the engine to run for 3-5 minutes.



# 2. Shut fuel valve OFF and run dry

Shut the fuel valve "OFF" and allow engine to run until it stalls out.



# 3. Turn the engine switch OFF

Move the engine switch to the "OFF" position to shut the engine off.



## 4. Empty the gas tank

Fully drain your gas tank as shown in "Emptying the Gas Tank" on page 38-39.



# 5. Remove spark plug

Remove spark plug as shown in "Spark Plug Maintenance" on page 36.



# 6. Add oil to cylinder

Add 2 tablespoons of 10W-30 motor oil directly into the spark plug hole, and pull the recoil to lubricate cylinder. After lubricating cylinder reinstall the spark plug as shown in "Spark Plug Maintenance" on page 37.



### 7. Store water pump

The water pump is ready to be stored in a cool dry area.



**CAUTION**: Do not obstruct any ventilation openings and keep the water pump in a cool dry area.

# **SPECIFICATIONS**

Model Number	XP652WP	XP650WP	XP904WP
Inlet Size	2″	3"	4″
Discharge Size	2″	3"	4″
Max Overhead Lift	92 ft	98 ft	98 ft
Max Suction Lift	26 ft	26 ft	26 ft
Max Flow Rate	158 gpm	220 gpm	427 gpm
Dimensions	18.7"L x 15.6"W x 15.4"H	22"L x 18"W x 18"H	28"L x 22"W x 22"H
Weight	60 lbs	67 lbs	110 lbs
Recommended Oil	10W-30	10W-30	10W-30
Engine Displacement	212 сс	212 сс	270 сс
Gasoline Capacity	1 gal	1 gal	1.7 gal
Oil Capacity	20.2 fl. oz. (0.6 L)	20.2 fl. oz. (0.6 L)	37.2 fl. oz. (1.1 L)
Bore	69 mm	69 mm	77 mm
Stroke	55 mm	55 mm	58 mm
Max Output	3600 rpm	3600 rpm	3600 rpm
Oil Cooling Type	Splash	Splash	Splash
Bearing Type	Stainless steel ball bearing	Stainless steel ball bearing	Stainless steel ball bearing
Cylinder Sleeve	Cast iron sleeve	Cast iron sleeve	Cast iron sleeve
Fuel Delivery System	Carburetor	Carburetor	Carburetor
Valve Type	OHV	OHV	OHV
Engine Type	4-Stroke	4-Stroke	4-Stroke
Engine Cooling Type	Forced air	Forced air	Forced air
<b>Emissions Compliance</b>	EPA/CARB	EPA/CARB	EPA/CARB



# TROUBLESHOOTING

This section of the manual is to help you troubleshoot problems with your water pump.



POWERING EVERYONE... ANYWHERE!

# **TROUBLESHOOTING**

Mode	Description	Solution	
Engine will not start	Engine switch is "OFF"	Set engine switch to "ON"	
	Fuel valve is "OFF"	Turn fuel valve to "ON"	
	Choke is open	Close the choke	
	Engine is out of fuel	Add fuel	
	Fuel is old or contaminated	Change fuel	
	Spark plug is dirty	Clean spark plug	
	Spark plug is broken	Replace spark plug	
	Engine is not level	Move engine to a level surface	
	Oil is low	Add/ change oil	
	Oil level is low	Add/ change oil	
Engine starts, but shuts off after running for short time	Fuel is old or contaminated	Change fuel	
	Engine is on incline exceeding 15°	Disconnect low oil sensor	



POWERING EVERYONE... ANYWHERE!



# WARRANTY

This section of the manual is to help you understand your warranty.

# WARRANTY

#### 3-year Warranty

All DuroMax Power Equipment warrant the original purchasers to a 3-year Parts Warranty (Residential Use ONLY: Unusually heavy or commercial use is covered for a period of 1-year) in the event of failure due to defects in electrical or mechanical components. Freight on any items submitted for replacement or repair under the Warranty is the responsibility of the equipment owner. This warranty is non-transferable and only valid to the original purchaser.

#### **Warranty Exclusions**

The DuroMax Power Equipment warranty does not cover repairs or returns when the fault is: Normal Wear and Tear, Installation Use or Maintenance Services, Cosmetic defects, Accessories, Failures due to acts of God or Natural Disasters, or problems related to/from aftermarket or non-OEM parts.

#### **Warranty Limitations**

DuroMax Power Equipment does not claim or hold any obligation to loss of time, freight charges, use of the product, or any incidental damages from the use of this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.

#### U.S EPA AND CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board, The United States Environmental Protection Agency (US EPA) and DuroMax Power Equipment, are pleased to explain the emission control system warranty on your 2022-2023 year small off-road engine. In the United States and California, new small off-road engines must be designed built and equipped to meet the State's stringent anti-smog standards. DuroMax Power Equipment must warrant the emission control system on your small off-road engine for the periods of time listed below provided there has been no abuse neglect or improper maintenance of your small off-road engine.

Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, and a catalytic converter. Also included may be hoses, belts, connectors, and other emission-related assemblies.

Where a warrantable condition exists, DuroMax Power Equipment will repair your small off-road engine at no cost to you including diagnosis, parts, and labor.

#### MANUFACTURER'S WARRANTY COVERAGE:

As the small off-road engine owner, you are responsible for the performance of the required

maintenance listed in your owner's manual. DuroMax Power Equipment recommends that you retain all receipts covering maintenance on your small off-road engine, but DuroMax Power Equipment cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine owner, you should, however, be aware that DuroMax Power Equipment may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine to a DuroMax Power Equipment distribution center as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, contact DuroMax Power Equipment authorized warranty service facility:

TEL: 1-844-387-6629 WEBSITE: www.duromaxpower.com ADDRESS: 5800 Ontario Mills Pkwy, Ontario CA 91764

This telephone number is only for the engines which the company name "DuroMax Power Equipment" on the emission label.

#### **DEFECTS WARRANTY REQUIREMENTS:**

(a) The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser.

(b) General Emissions Warranty Coverage. DuroMax Power Equipment warrants to the ultimate purchaser and each subsequent owner that the engine or equipment is:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by US EPA & Air Resources Board; and

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

(c) The warranty on emissions-related parts will be interpreted as below:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the warranty period defined in Subsection(b)(2). If any such part fails during the period of warranty coverage, it must be repaired or replaced by DuroMax Power Equipment according to

# WARRANTY (CONTINUED)

Subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for the remaining warranty period.

- (2) Any warranted part that is scheduled only for regular inspection in the written instructions required by subsection(d)must be warranted for the warranty period defined in Subsection(b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.
- (3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by DuroMax Power Equipment according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the time prior to the first scheduled replacement.
- (4) Repair or replacement of any warranted part under the warranty must be performed at no charge to the owner at a warranty station.(5) Notwithstanding the provisions of Subsection (4) above, warranty services or repairs must be provided at all DuroMax Power Equipment distribution centers that are franchised to service the subject engines.
- (6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is, in fact, defective provided that such diagnostic work is performed at a warranty station. (7) DuroMax Power Equipment is liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.
- (8) Throughout the emissions warranty period defined in Subsection (b)(2), DuroMax Power Equipment must maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
- (9) Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner such use will not reduce the warranty obligations of DuroMax Power Equipment
- (10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts will be grounds for disallowing a warranty claim. DuroMax Power Equipment will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.
- (11) DuroMax Power Equipment issuing the warranty shall provide any documents that describe that manufacturer's warranty procedures or policies within five working days of a request by the US EPA & Air Resources Board.

#### Exhaust Emission Warranty Parts List.

- (1) Fuel Metering System
  - (i) Carburetor and internal parts (and/or pressure regulator or fuel injection system).

(ii) Air/fuel ratio feedback and control system.

- (iii) Cold start enrichment system.
- (iv) Fuel tank.
- (2) Air induction system
  - (i) Controlled hot air intake system.
  - (ii) Intake manifolds.
  - (iii) Air filter.
- (3) Ignition System
  - (i) Spark Plugs.
  - (ii) Magneto or electronic ignition system.
  - (iii) Spark advance/retard system.
- (4) Exhaust Gas Recirculation (EGR) System
  - (i) EGR valve body, and carburetor spacer if applicable.
  - (ii) EGR rate feedback and control system.
- (5) Air Injection System
  - (i) An air pump or pulse valve.
  - (ii) Valves affecting the distribution of flow.
  - (iii) Distribution manifold.
- (6) Catalyst or Thermal Reactor System
  - (i) Catalytic converter.
  - (ii) Thermal reactor.
  - (iii) Exhaust manifold.

DuroMax Power Equipment will furnish with each new engine written instructions for the maintenance and use of the engine by the owner

(7) Particulate Controls

(i) Traps, filters, precipitators, and any other device used to capture particulate emissions.

(8) Miscellaneous Items Used in Above Systems
(i) Electronic controls
(ii) Vacuum, temperature, and timesensitive valves and switches.
(iii) Hoses, belts, connectors, and assemblies.

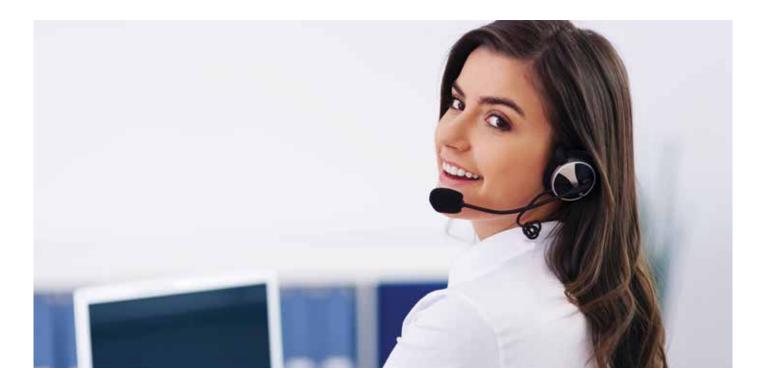
# **CUSTOMER SERVICE**

DuroMax Power Equipment is committed to ensuring that our products perform when they need to. Our Water Pumps are your lifeline in the event of an emergency. Should you have any problems, please contact our customer service department:

#### DUROMAX POWER EQUIPMENT 5800 Ontario Mills Parkway Ontario, CA 91764

Customer Service: 844-DUROMAX Customer Service Hours: 8-5 pm PST Mon-Fri

Website: www.duromaxpower.com Email: customerservice@duromaxpower.com





POWERING EVERYONE... ANYWHERE!



5800 Ontario Mills Parkway Ontario, CA 91764 United States

844-DUROMAX

