

# **ITEM # TWPUMP**

## **2-Inch (50mm) Semi Trash / Water Pump**

### **Assembly & Operating Instructions**



#### **READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.**

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

**IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,  
DO NOT OPERATE THIS PRODUCT!**

#### **HAVE QUESTIONS OR PROBLEMS? CONTACT CUSTOMER SERVICE.**

If you experience a problem or need parts for this product, visit our website <http://www.buffalotools.com> or call our customer help line at 1-866-460-9436, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

**FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE.**

**KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.**

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## THIS ENGINE MEETS U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1054.120

The emission-related warranty is valid for two (2) years. Keep the purchase receipt and mail in the product registration card for proof of purchase. Buffalo Corp limits emission-related warranty repairs to authorized service centers for owners located within 100 miles of an authorized service center. For owners located more than 100 miles from an authorized service center, Buffalo Corp will, in its sole discretion, either pay for shipping costs to and from an authorized service center, provide for a service technician to come to the owner to make the warranty repair, or pay for the repair to be made at a local non-authorized service center. The provisions of this paragraph apply only for the contiguous states, excluding the states with high-altitude areas identified in 40 CFR part 1068, Appendix III.

To exercise this warranty, DO NOT RETURN TO RETAILER. Instead, call Customer Service toll free at 1-866-460-9436 (email address [info@buffalotools.com](mailto:info@buffalotools.com)) and you will be instructed on where to take the engine for warranty service. Take the generator and proof of purchase (your receipt) to the repair facility recommended by the Customer Service Representative. The warranty does not extend to generators damaged or affected by fuel contamination, accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse.

## 90 DAY LIMITED WARRANTY

This item is warranted to be free from defects in materials and workmanship for a period of 90 days from date of original purchase. Buffalo Corp. is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to 90 days as stated, or as otherwise stated, in this written limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. Some states do not allow limitation on the length of an implied warranty. Buffalo Corp will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the 90 day warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

## RECOGNIZE SAFETY SYMBOLS, WORDS & LABELS

### WHAT YOU NEED TO KNOW ABOUT SAFETY INSTRUCTIONS

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

#### **WARNING**

*GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE. YOU COULD BE BURNED OR SERIOUSLY INJURED IF THE GASOLINE IS IGNITED. Before refueling, stop the engine and keep heat, sparks and flame away. Handle fuel only outdoors. Do not fill the fuel tank above the upper limit line. Wipe up spills immediately.*

#### **DANGER**

*EXHAUST CONTAINS POISONOUS CARBON MONOXIDE GAS THAT CAN BUILD UP TO DANGEROUS LEVELS IN CLOSED AREAS. BREATHING CARBON MONOXIDE CAN CAUSE UNCONSCIOUSNESS OR DEATH. Never run the generator in a closed or even partly closed area where people may be present.*

### Notice Regarding Emissions:

Engines certified to comply with California and 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: Three-Way Catalyst (TWC) (if equipped), and Engine Modifications (EM).

## IMPORTANT SAFETY INSTRUCTIONS

# STOP!

Before using this product, if you have any questions regarding the hazard and safety notices listed in this manual and/or on this product, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

### DANGER

**Carbon Monoxide Gas:** When in operation, the exhaust from this product contains poisonous carbon monoxide gas. Carbon monoxide gas is both odorless and colorless AND may be present even if you do not see or smell gas. Breathing this poison gas can lead to headaches, dizziness, drowsiness, loss of consciousness and eventually death.

- Use this product ONLY outdoors in non-confined areas.
- Keep at least several feet of clearance on all sides to allow proper ventilation for this product.

### WARNING

**Flammable Gasoline:** This product 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.

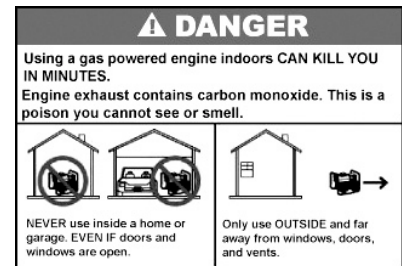
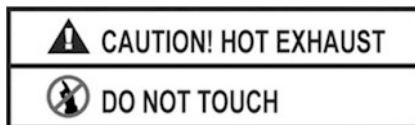
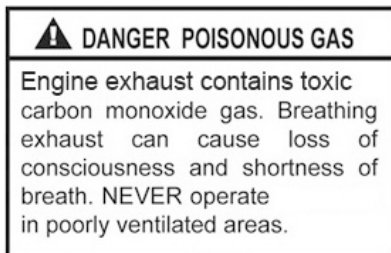
- Do not operate this product near open flame.
- Do not smoke near this product.
- Always operate this product on a firm, level surface.
- **Gasoline is highly flammable and explosive. Handling fuel can result in serious injury or burns.**
- Always shut down this product before refueling. Refuel in a well-ventilated area. Keep heat, sparks and flame away while refueling and away from the location where gasoline is stored. Never refuel indoors where gasoline fumes may reach flames and/or sparks.
- Allow this product to cool for at least 2 minutes before removing the fuel tank cap. Loosen the cap slowly to relieve pressure in the fuel tank. Avoid spilling fuel.
- Do not fill the fuel tank above the upper limit line. Gasoline may expand during operation. Do not fill to the top of the tank.
- Always check for spilled gasoline and immediately wipe it up before starting this product.
- Empty the fuel tank before storing or transporting this product.
- Always handle fuel outdoors.
- Before transporting, turn the fuel valve to the "OFF" position and disconnect the spark plug.

## **⚠ DANGER**

**High Temperatures:** This product produces heat when in operation. Temperatures near the exhaust can exceed 150 Degrees Fahrenheit (65 Degrees Celsius).

- Do not touch hot surfaces. Observe all warning placards on this product denoting hot surfaces.
- Allow this product to cool for several minutes after use before touching the engine, muffler or other areas that are hot during operation and before storing indoors.
- Hot exhaust may ignite some materials. Keep flammable materials away from this product.
- Keep at least several feet of clearance on all sides of this product during operation. Do not enclose this product in any structure.

In addition to the previously described safety information, familiarize yourself with all safety and hazard placards on this product.



## **⚠ WARNING**

**READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions may result in serious burns, fire and/or serious personal injury.

### **WHAT YOU NEED TO KNOW ABOUT SAFETY INSTRUCTIONS**

The warning and safety instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment. Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand before operating the product.

# GENERAL PRODUCT SPECIFICATIONS

## PACKAGE CONTENTS

Semi Trash / Water Pump

Hose Kit: 12 Ft. Intake Hose, 25 Ft. Discharge Hose, Intake Strainer, Outlet Hose Fitting, Hose Clamps, Outlet Hose Adapter

## SPECIFICATIONS

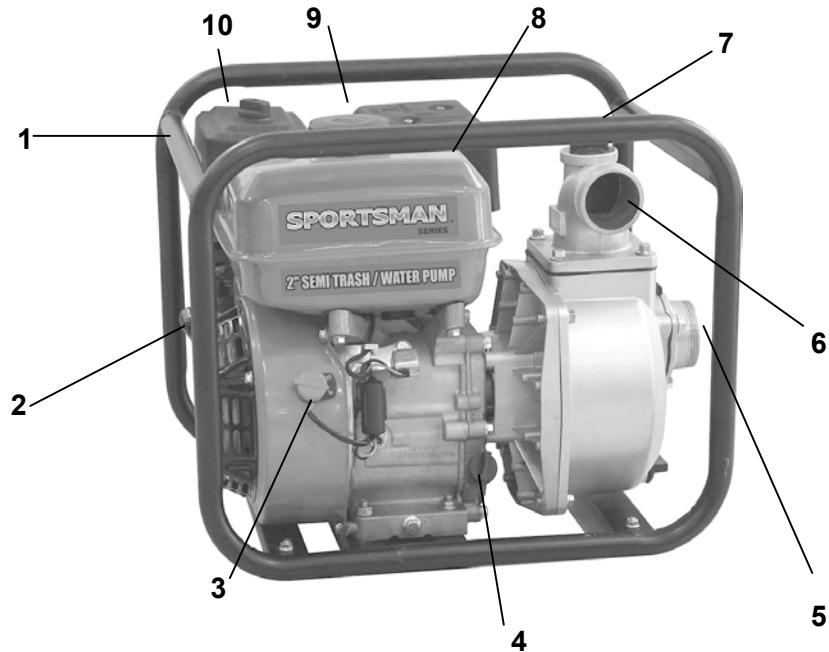
Engine	4-Stroke
Engine Type	Gasoline, 87 Octane
Engine Displacement	212cc
Gasoline Capacity	0.81 Gallons
Engine Oil	SAE 10W-30
Engine Oil Capacity	16.9 oz.
Horsepower	7.0 HP
Displacement	132 Gal/Minute

## FEATURES

2-Inch (50mm) Inlet & Outlet  
 Max. Lift Head: 82 Ft  
 Max. Suction Head: 19.6 Ft.  
 Pump Speed 3,600 RPM  
 Flow : 10,950 x 85% GPH @ 0 Lift  
 3,000 x 85% GPH @ 70 Ft. Lift  
 Cast Iron Propeller

## COMPONENTS

- 1) Tube Frame
- 2) Pull Start Handle
- 3) On/Off Switch
- 4) Oil Reservoir
- 5) Water Inlet
- 6) Water Outlet
- 7) Priming Cap
- 8) Fuel Tank
- 9) Fuel Cap
- 10) Air Filter Assembly



## ASSEMBLY

The Intake Filter (A) prevents damaging particles from “entering” the Water Pump. Connect the Intake Filter (A) to the end of a 2-inch hose with a Hose Clamp (B).

Place the Hose Coupling (D) and secure it to the other end of the hose with a Hose Clamp (B). Then connect the entire assembly to the pump intake Joint (H) with a Gasket (F).

The Outlet Side discharges water as it “exits” the Pump.

To attach the outlet hose to the Joint (H), connect the hose to the pump outlet using a Hose Clamp (B) and Gasket (F).

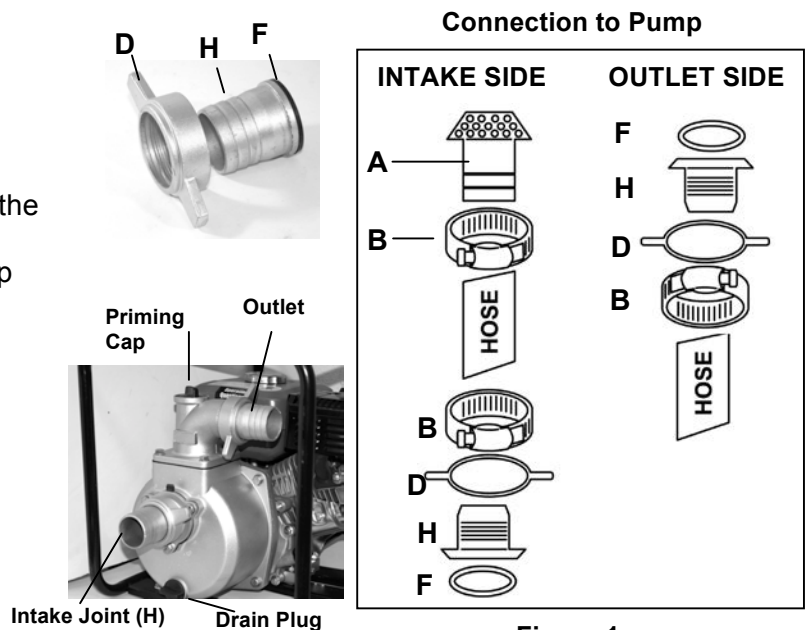


Figure 1



## PREPARING THE SEMI TRASH / WATER PUMP FOR USE

If this Gasoline Water Pump is being used for the first time, the following few steps are required to prepare it for use.

### STEP 1 – ADD OIL

**When new from the package, this Water Pump contains no oil in the engine crankcase. Add the correct quantity of oil before operating this Water Pump for the first time.** This Water Pump requires engine oil to function. Engine oil is a major factor affecting engine performance and service life. The correct quantity of oil is equal to the oil capacity of the engine crankcase and is listed below. Always determine that this Water Pump has the correct quantity of oil before use.

<b>Oil Capacity (fluid oz.)</b>	16.9
<b>Oil Type Recommended</b>	SAE 10W-30

To add oil:

1. Confirm that this Water Pump is on a level surface.
2. Open the Oil Cap (A, Figure 2).
3. Using a funnel, add oil to fill the engine crankcase to the correct quantity as stated above.
4. Replace Oil Cap.

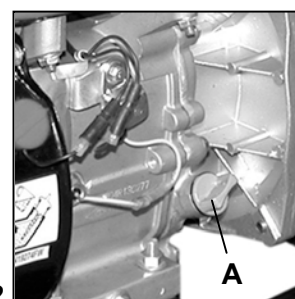


Figure 2

### STEP 2 – ADD GASOLINE

#### **⚠ WARNING**

**Gasoline and gasoline fumes are highly flammable and explosive. Handling fuel can result in serious injury or burns.**

- Do not fill the fuel tank near a heat, sparks or an open flame. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.
- Do not overfill the fuel tank. Always check for fuel spills and immediately wipe them up. Spilled fuel is a fire hazard and causes environmental damage.

To ensure that this Water Pump runs smoothly, use only FRESH, UNLEADED GASOLINE WITH AN OCTANE RATING OF 87 OR HIGHER. Unleaded gasoline produces fewer engine and spark plug deposits and extends the life of the exhaust system.

1. Confirm that this Water Pump is on a level surface.
2. Unscrew fuel tank cap and set aside. (NOTE: The fuel tank cap may be tight and difficult to unscrew.)
3. Slowly add fresh, unleaded gasoline to the fuel tank. Be careful not to fill the fuel tank above the upper limit line. The fuel tank capacity for this Water Pump is listed below. NOTE: Because gasoline can expand, do not fill the fuel tank to the very top.
4. Securely tighten the fuel tank cap and immediately wipe up any spilled gasoline with a dry cloth.

<b>Fuel Tank Capacity (gals)</b>	0.81
<b>Fuel Type</b>	Fresh, Unleaded Gasoline Octane Rating 87 or Higher

## STARTING THE SEMI TRASH / WATER PUMP

### To start this Water Pump:

1. Confirm that Oil has been properly added.
2. Confirm that Gas has been properly added.
3. Turn the fuel valve to the “on” position.
4. Move the choke lever to the “closed” position.
5. Set the engine switch to the “on” position. (Figure 3)
6. Slowly pull on the recoil starter handle until a slight resistance is felt. Then pull briskly to start the engine.
7. Gently return the cord into the Water Pump to avoid damage to the starter or housing. Never allow the cord to snap back.
8. If the engine fails to start, repeat step 6. NOTE: After repeated attempts to start the engine, consult the troubleshooting guide before attempting again. If problems persist, **call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.**
9. Once the engine has started and runs for about a minute, move the choke lever approximately half way towards the “open” position. Wait an additional 30 seconds and then move the choke lever completely over to the “open” position.
10. Allow this Water Pump to run for several minutes before beginning the project.

### BREAK-IN PERIOD

Breaking in an engine of any size is important to the life of the engine. The first twenty hours of operation is considered the break-in period for this Water Pump. For best results and an engine with fewer problems, it is suggested that you:

- Avoid heavy loads during the first twenty hours.
- Not run the engine at its highest speeds for extended periods.
- Change the engine oil after ten hours of operation during the break-in period only.

## OPERATION

### **⚠ WARNING**

**Wear eye and hearing protection when using this Gasoline Water Pump.**

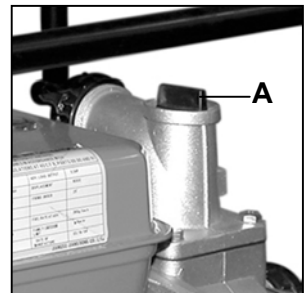
### **CAUTION**

**Moisture can condense in a unit, so it is extremely important to drain the tank after each use. If left in the tank, moisture could cause rust and weaken the tank.**

### PRIMING THE SEMI TRASH / WATER PUMP

**Be certain that hoses have been attached to BOTH the Intake and Outlet joints.** (Follow instructions on page 6). Now the Water Pump is ready to be primed before use. Priming forces air out of the pump allowing it to pump water more efficiently.

1. Place the Water Pump on a solid, level surface as close to the water source as possible.
2. Remove the Priming Plug (A, Figure 3)
3. Fill the Water Pump with water by filling through the opening.
4. Replace the Priming Plug.
5. Start the engine.
6. The Water Pump is now primed and ready for use.



**Figure 3**



## MAINTENANCE

Routine maintenance of this Water Pump is essential for safe, economical, and trouble-free operation. It will help prolong the life of this Water Pump as well as help reduce air pollution.

### CAUTION

**Never perform maintenance procedures while this Water Pump is running. Allow this Water Pump to cool before commencing any maintenance procedures. Keep heat, sparks and flame away.**

### WARNING

**Improper maintenance and/or failure to correct any problems prior to operating this Water Pump can cause a malfunction, which could cause death or serious injury. Always follow the inspection and maintenance recommendations and schedules in this manual.**

During colder temperatures, icing may build in the carburetor. If this develops, the engine may run rough, lose power and possibly stall. This temporary condition can be overcome by deflecting some of the hot air from the engine over the carburetor area.

Another method of reducing risks of freeze damage is to completely drain the Water Pump before placing it in storage.

## CHECKING THE OIL LEVEL

It is important to check the oil level in the engine crankcase before each use to ensure that there is a sufficient quantity.

To check the oil level:

1. Verify that this Water Pump is shut down and on a level surface.
2. Unscrew the oil cap from the engine.
3. There should be oil in the engine. If there is no oil, add oil until the engine crankcase is filled.
4. Confirm that the oil cap is properly in place when finished verifying the oil level.

**NOTE: Never dispose of used motor oil in the trash, down a drain or on the ground. Put oil in a sealed container and contact your local recycling center or auto garage to arrange oil disposal.**

Oil Capacity (fluid oz)	16.9
Oil Type Recommended	SAE 10W-30

## CHANGING THE OIL

### **⚠ WARNING**

**Oil is very hot immediately after use. Use extreme caution when working with a gasoline-powered engine and its components such as engine oil. Serious burns can result if proper care is not taken.**

The engine oil should be changed every fifty hours on this Water Pump.

To change the oil:

1. Run engine until it runs out of fuel. Allow it to stop, and cool slightly.
2. Keep spark plug wire away from spark plug.
3. While engine is slightly warm, remove drain bolt and dipstick. Drain oil into proper container. (Tilt the Water Pump to drain the engine oil into the container.)
4. Reinstall drain bolt and tighten it securely.
5. Place engine on level surface. Add up to 16.9 ounces of 10W-30 oil, to upper limit dipstick. Do not overfill.
6. Reinstall dipstick and tighten securely.

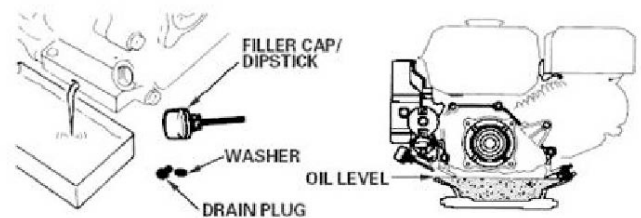


Figure 4

## AIR FILTER MAINTENANCE

### **⚠ WARNING**

**Wear ANSI-approved safety gear, including safety goggles and heavy-duty work gloves when servicing this Water Pump.**

This Water Pump will work more efficiently with a clean air filter. The air filter should be checked every 25 hours of use, regardless of workload, and replaced every 100 hours regardless of workload.

To clean or replace the air filter:

1. Remove the air filter cover, which is held in place by a wing nut and is located on top of the Water Pump. (A, Figure 5)
2. Remove the air filter.
3. If the air filter is paper, use a vacuum to remove any trapped dirt. If this doesn't work, replace with a new filter.
4. If the air filter is foam, wash the filter in warm water and a mild detergent before rinsing thoroughly.
5. Squeeze out excess moisture and dry completely.
6. Briefly soak the filter in lightweight oil, squeezing out the excess, before replacing it in the Water Pump.

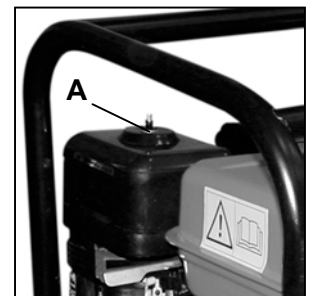


Figure 5

## SPARK PLUG MAINTENANCE

This Water Pump will work more efficiently with a properly functioning spark plug. The spark plug should be replaced every 100 hours of use.

To check or replace the spark plug:

1. Disconnect the spark plug wire from the spark plug.
2. Clean around the spark plug using a wire brush before removing the plug using a spark plug wrench.
3. Check the spark plug for foreign substances. If moisture is present, wipe it off using a clean shop towel. If there are deposits present (A, Figure 6), use a fine grit sand paper to remove them. If there is structural damage to the spark plug, replace it with a new one (B, Figure 6).
4. When installing the new plug, replace it with a Type F7RTC and set the gap to 0.5 – 0.7 mm.

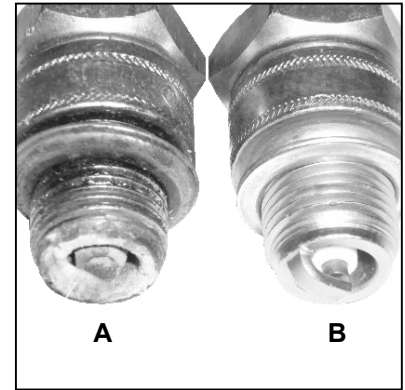


Figure 6

## STORAGE

### **⚠ CAUTION**

**Do not store gasoline for more than 3 months.**

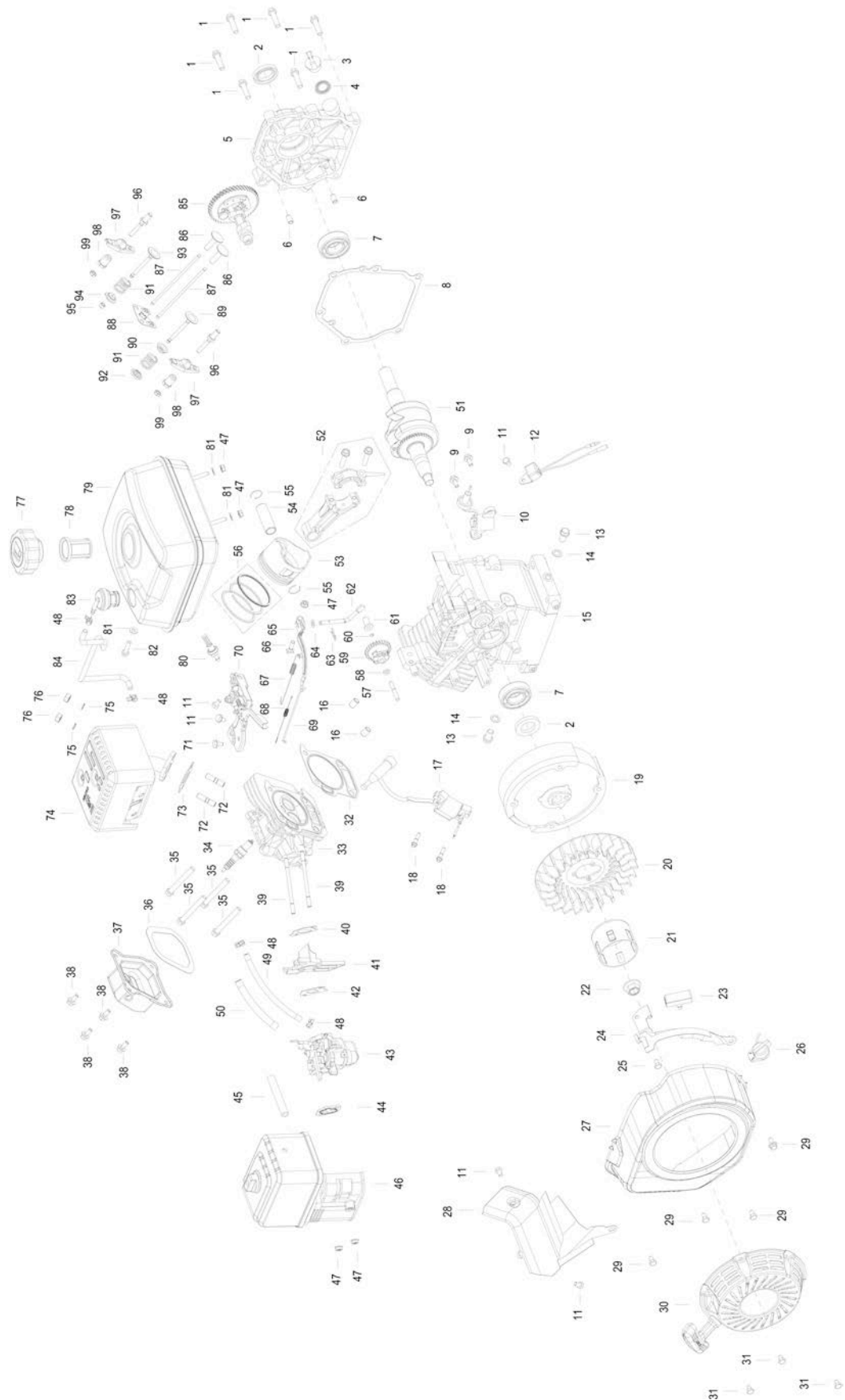
**Never place any type of storage cover on this Water Pump while it is still hot.**

**Prior to restarting, thaw out any possible ice from the Water Pump.**

The life of this Water Pump can be extended through proper maintenance procedures. When placing this Water Pump in storage for over fourteen days, following these procedures will increase its service life.

1. Allow engine to cool completely, and then clean the Water Pump using a cloth and mild detergent.
2. Remove any fuel from the fuel tank.
3. Disconnect the spark plug wire and remove the spark plug.
4. Pour one teaspoon of engine oil into spark plug hole and replace the spark plug but do not reconnect the spark plug wire.
5. Gently, but firmly pull the starter cord to distribute the oil inside the cylinder, stopping when you feel resistance.
6. Remove all water from the primer water tank.
7. Wipe all metal components with an oil-soaked rag to inhibit rust and corrosion.
8. Cover the Water Pump with a tarp and store in a cool, dry, well-ventilated space out of the reach of children.

PARTS DIAGRAM

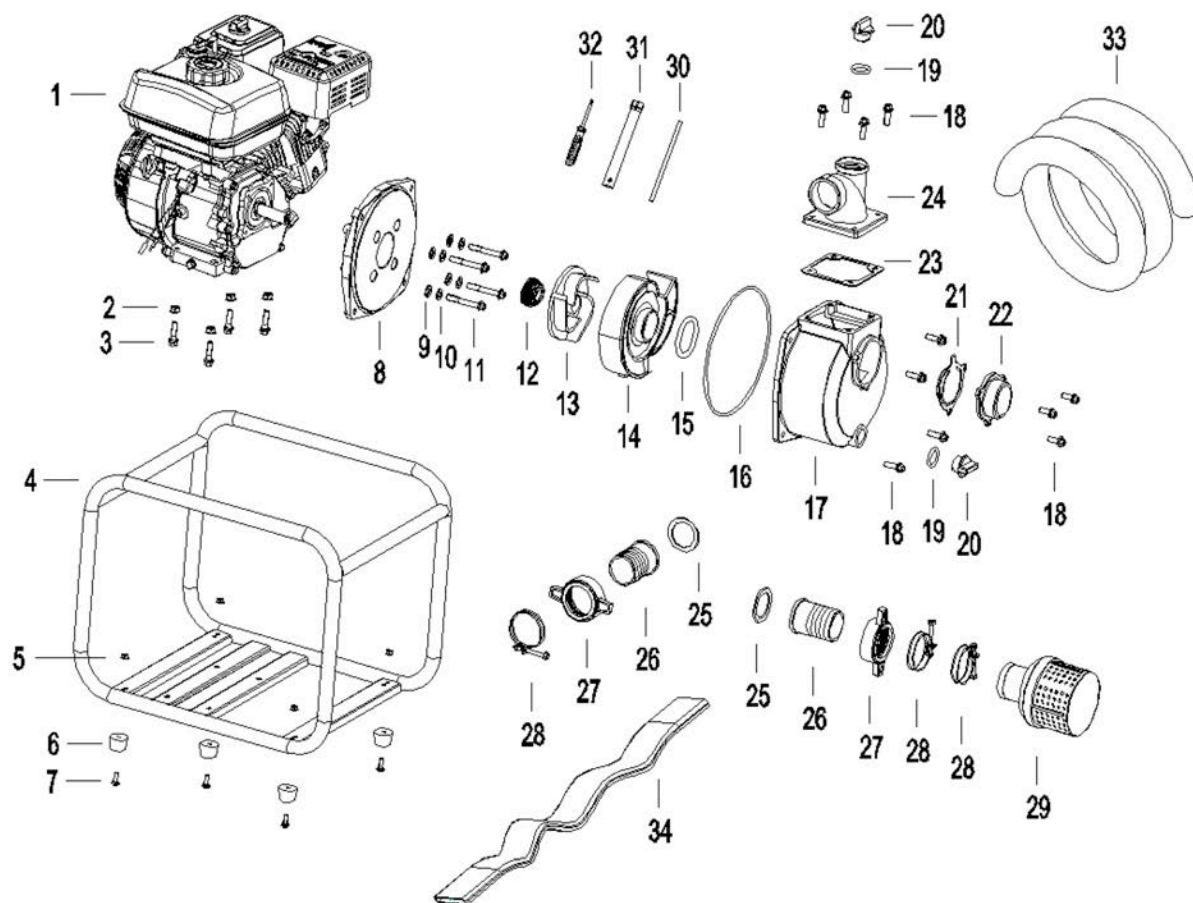


## PARTS LIST

	CODE	DESCRIPTION	QTY.
1	B0133080306B	Bolt	6
2	21020121001000	Oil Seal	2
3	31040121001000	Dipstick	1
4	31050112001000	Oil Seal, Dipstick	2
5	31010121001000	Cover, Crankcase	1
6	31100121001000	Guide Dowel	2
7	B12016020553	Bearing	2
8	31020121001001	Gasket, Crankcase	1
9	B0133060166B	Bolt	2
10	21040121001000	Oil Level Sensor	1
11	B0131060106B	Bolt	5
12	21060127002000	Electronic Switch	1
13	31060124001000	Drain Plug	2
14	31070124001001	Washer, Drain Plug	2
15	21020123001002	Crankcase Body	1
16	32070132001000	Guide Dowel	2
17	28040121001001	Ignition coil	1
18	B01310602566	Bolt	2
19	24050121001000	Fly Wheel	1
20	34130121001000	Fan Wheel	1
21	34120121001000	Start-Up Ratchet Gear	1
22	B04291415056	Nut	1
23	38010121001000	clamp	1
24	26060121001000	Shield 1	1
25	B01310602066	Bolt	1
26	28020121001003	Switch Assy, ignition	1
27	26050121001590	Engine Side Cover	1
28	36180121001000	Shield 2	1
29	B01310601266	Bolt	4
30	26020121001091	Starter Cover Assy	1
31	B0133060086B	Bolt	3
32	32011123001000	Gasket, Cylinder Head	1
33	22020122001002	Cylinder Head Assembly	1
34	22070121001000	Spark Plug	1
35	B0133080606B	Bolt	4
36	32060121001000	Gasket, Cylinder Head Cover	1
37	22040121001003	Cylinder Head Cover	1
38	B01310601466	Bolt	4
39	32030121001002	Double End Stud	2
40	32040121001001	Gasket, Intake 1	1
41	32020121001000	Spacer, Heat Insulating	1
42	32050121001001	Gasket, Intake 2	1
43	27080122001000	Carburetor Assembly	1
44	27080121001000	Spacer	1
45	37100121001000	Breather Tube	1
46	27350121001000	Air Filter Assembly	1
47	B04280600026	Nut	5
48	37200121001000	Clamp, Fuel Line,	4
49	37520121001001	Hose, Fuel	0.165m
50	37220121001001	Jacket	1

	CODE	DESCRIPTION	QTY.
51	24020122001005	Crankshaft	1
52	24040121001000	Connecting Rod Assembly	1
53	34010123001001	Piston	1
54	34060121001000	Pin, Piston	1
55	34070121001000	Circlip, Piston Pin	2
56	24020123001001	Piston Ring Assembly	1
57	35040121001000	Pin	1
58	35080121001000	Spacer 3	1
59	25040121001000	Adjustment, Centrifugal	1
60	31020124001000	Circlip	1
61	35100116001000	Cover, Push rod	1
62	35030121001000	Governor Crank	1
63	35020127002000	Hair Pin	1
64	35090121001000	Spacer 2	1
65	35010121001000	Arm	1
66	35030127002000	Bolt, Square	1
67	35050121001000	Spring 1, Tension	1
68	35060121001000	Spring 2, Tension	1
69	35070121001000	Rod, Tension	1
70	25020121001000	RPM Adj Mechanism	1
71	B01310601666	Bolt	1
72	32070121001000	Double End Stud	2
73	32010121001000	Vent-Pipe Washer	1
74	27010122001000	Muffler Assy	1
75	B0700000804B	Spring Washer	2
76	B0420080002B	Nut	2
76	27140121001002	fuel tank cap	1
77	20160422001001	Filter Gauze	1
78	27370121001751	Fuel Tank	1
79	27180121001000	Vitta Tie-in Assy	1
80	37500121001001	Shock Absorption Washer	3
81	B01330603066	Bolt	1
82	27280121001000	Dump Valve Assy	1
83	37010123046005	Hose	1
85	23020122001000	Camshaft	1
86	33010122001000	Stud, Connecting	2
87	23040121001000	Rod, Connecting	2
88	23060121001000	Guide Plate, Connecting Stud	1
89	33050121001002	Valve, Intake	1
90	23020132001000	Oilseal, Valve	1
91	33060121001000	Spring, Valve	2
92	33070121001000	Upper Retainer, Intake Valve Spring	1
93	33040121001002	Valve, Exhaust	1
94	33090121001000	Upper Retainer, Exhaust Valve Spring	1
95	33020121001000	Cap, Exhaust Rod	1
96	33020127002000	Adjusting Stud, Valve Clearance	2
97	33080121001000	Arm	2
98	33050127002000	Buttonhead, Arm	2
99	33100124001000	Adjusting Nut, Valve Clearance	2

## PARTS LIST



No.	CODE	DESCRIPTION	QTY.
1	101230880001000	engine	1
2	B0428080002B	nut	4
3	B01310803566	bolt	4
4	20020513430120	tube frame	1
5	B04280600026	nut	4
6	30010513430000	shock absorber	4
7	B01240601226	bolt	4
8	30610513430077	pump cover	1
9	30400513430800	rubber washer	4
10	B07030008046	washer	4
11	B0133080606B	bolt	4
12	20180513430077	seal assy	1
13	30620513430077	water pump impeller	1
14	30630513430077	volute casing	1
15	30640513430077	rubber bushing	1
16	30650513430077	O ring	1
17	30660513430077	housing of pump	1

No.	CODE	DESCRIPTION	QTY.
18	B01330802566	bolt	11
19	30670513430077	O ring	2
20	30680513430077	plug packing	2
21	30690513430077	check valve	1
22	30700513430077	inlet flange	1
23	30710513430077	rubber washer	1
24	30720513430077	outlet flange	1
25	30730513430077	gasket	2
26	30740513430077	pipe joint	2
27	30750513430077	hose coupling	2
28	20190513430077	hose clamp	3
29	20200513430077	filter	1
30	30690223331022	round rod	1
31	30980850101021	Spark plug sleeve	1
32	38150410900000	The screwdriver	1
33	30980513430000	2-inch inlet hose	3.6m
34	30990513430000	2-inch outlet hose	6m



## **EMISSION CONTROL SYSTEM WARRANTY**      **Buffalo Corp.**

### **Your Warranty Rights and Obligations**

The United States Environmental Protection Agency (US EPA) and Buffalo Corp. are pleased to explain the exhaust and evaporative emissions control system warranty on your 2020-2021 model year small off-road engine. Buffalo Corp. must warrant the emissions 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 or equipment leading to the failure of the emissions control system. Your emissions control system may include parts such as the carburetor or fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines (for liquid fuel and fuel vapors), fuel caps, valves, canisters, filters, clamps and other associated components. Also included may be hoses, belts, connectors, and other emission-related assemblies.

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

### **Manufacturer's Warranty Coverage:**

The exhaust and evaporative emissions control system on your small off-road engine is warranted for two years. If any emissions-related part on your small off-road engine is defective, the part will be repaired or replaced by Buffalo Corp.

### **Owner's Warranty Responsibility**

As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Buffalo Corp. recommends that you retain all receipts covering maintenance on your small off-road engine, but Buffalo Corp. cannot deny warranty coverage 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 Buffalo Corp. may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine to a Buffalo Corp. distribution center or service center as soon as the problem exists. The warranty repairs shall be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact Buffalo Corp. customer service representative at 1-866-460-9436 or write to [info@buffalotools.com](mailto:info@buffalotools.com).

### **DEFECTS WARRANTY COVERAGE**

Adopted by the EPA, Buffalo Corp. warrants to the ultimate purchaser and each subsequent purchaser that the small off-road engine (SORE)(1) has been designed, built and equipped so as to conform with all applicable regulations; and (2) is free from defects in materials and workmanship that cause the failure of a warranted part to conform with those regulations as may be applicable to the terms and conditions stated below.

(a) The warranty period begins on the date the engine is delivered to an ultimate purchaser or first placed into service. The warranty period is two years.

(b) Subject to certain conditions and exclusions as stated below, the warranty on emissions related parts is as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in your Owner's Manual is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by Buffalo Corp. according to Subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the periods.

(2) Any warranted part that is scheduled only for regular inspection in your owner's manual is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in your owner's manual is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by Buffalo Corp. according to Subsection (4) below. Any such part repaired or replaced under

warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.

(5) Notwithstanding the provisions herein, warranty services or repair will be provided at all of our distribution centers that are franchised to service the subject engines.

(6) The engine 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) Buffalo Corp. is liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the engine warranty period stated above, Buffalo Corp. will maintain a supply of warranted part sufficient to meet the expected demand for such parts.

(9) Any replacement 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 Buffalo Corp.

(10) Add-on or modified parts that are not exempted by the EPA may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. Buffalo Corp. will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

(11) The manufacturer issuing the warranty shall provide any documents that describe that manufacturer's warranty procedures or policies within five working days of request by EPA.

#### **EMISSION WARRANTY PARTS LIST**

(1) Fuel Metering System:

- (a) Gasoline carburetor assembly and its internal components
- (b) Carburetor gaskets
- (c) fuel lines (for liquid fuel and fuel vapors)
- (d) Clamps
- (e) Fuel tank
- (f) Fuel line fittings
- (g) Pressure regulator (if equipped)
- (h) Mixer assembly and its internal components (if equipped)

(2) Air induction system including:

- (a) Intake pipe/manifold
- (b) Air cleaner

(3) Ignition system including:

- (a) Spark plug
- (b) Ignition coil

(4) Catalytic muffler assembly including:

- (a) Muffler gasket
- (b) Exhaust manifold
- (c) Catalytic converter

(5) Crankcase breather assembly including:

- (a) Breather connection tube

(6) Fuel tank evaporative emissions control system including:

- (a) Purge valves
- (b) Fuel cap
- (c) Fuel tank (d) fuel lines (for liquid fuel and fuel vapors)

(7) Miscellaneous items used in above systems including:

- (a) Switches
- (b) Hoses, belts connectors and assemblies

(8) Air injection system

- (a) Pulse valve

Please Note:

For this warranty, Buffalo Corp. shall warrant the Evaporative and Exhaust combined emission control system on your products.