

ITEM # AUGER52

INSTRUCTION MANUAL



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!

If you experience a problem, have questions or need parts for this product, call Customer Service 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.



To register your product warranty, please visit buffalotools.com or scan the QR code.

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SAFETY

OWNER'S RESPONSIBILITY

Accurate assembly and safe and effective use of the auger is the owner's responsibility.

Read and follow all safety instructions.

Carefully follow all assembly instructions.

Maintain the auger according to directions and schedule included in this operator's manual.

Ensure that anyone who uses the auger is familiar with all controls and safety precautions.

SPECIAL MESSAGES

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

IMPORTANT SAFETY PRECAUTIONS

Please read this section carefully. Operate the auger according to the safety instructions and recommendations outlined here and inserted throughout the text. Anyone who uses this auger must read the instructions and be familiar with the controls.

This symbol points out important safety instructions which if not followed could endanger your personal safety. Read and follow all instructions in this manual before attempting to operate this equipment.

Do not carry the auger power head between holes with the engine running.

The auger should not rotate when the engine is idling. If it does rotate when engine is idling, contact Customer Service for instructions.

Keep hands, feet, hair and loose clothing away from any moving parts on engine and auger.

Do not allow children to operate this power auger. Do not allow adults to operate the auger without proper instruction.

Do not operate any power equipment under the influence of alcohol or drugs.

Keep all screws, nuts and bolts tight.

Engine should be turned off and cool, spark plug wire must be removed from spark plug before any repairs are attempted.

Temperature of muffler and nearby areas may be hot areas. Avoid these areas.

Never run engine indoors or in an enclosed area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

If the earth auger will not turn in a hole, turn engine off and allow to cool before attempting to remove it manually.

Do not let anyone who does not fully understand the manual thoroughly to operate the auger.

When operating the auger, make sure to keep bystanders 50 ft away.

CAUTION

CAUTION INDICATES YOU, OR YOUR EQUIPMENT, CAN BE HURT IF THE SAFETY INSTRUCTIONS THAT FOLLOW THIS SIGNAL WORD ARE NOT OBEYED .

IMPORTANT

INDICATES HELPFUL INFORMATION FOR PROPER ASSEMBLY, OPERATION, OR MAINTENANCE OF YOUR EQUIPMENT.

ENGINE SAFETY PRECAUTIONS

Warning: Carbon Monoxide Poisoning

All engines contain carbon monoxide in their exhaust. Carbon monoxide is a deadly, colorless, tasteless, odorless gas which may be present even if you do not smell or see any engine exhaust. Levels of carbon monoxide, which can be deadly, can be present for days in an enclosed area that has poor ventilation. Any level of carbon monoxide, if inhaled, can cause headaches, drowsiness, nausea, dizziness, confusion and eventually death. If you experience any of these symptoms, seek fresh air and medical attention immediately.

Preventing Carbon Monoxide Poisoning

Never run engine indoors.

Never try to ventilate engine exhaust indoors. Carbon monoxide can reach dangerous levels very quickly.

Never run engine outdoors where exhaust fumes may be pulled into a building.

Never run engine outdoors in a poorly ventilated area where the exhaust fumes may be trapped and not easily taken away. (Examples include: in a large hole or areas where hills surround your working area.)

Never run engine in an enclosed or partially enclosed area. (Examples include: buildings that are enclosed on one or more sides, under tents, carports or basements.)

Always run the engine with the exhaust and muffler pointed in the direction away from the operator.

Never point the exhaust muffler towards anyone. People should always be many feet away from the operation of the engine and its attachments.

Gasoline Fires or handling Fuel Safely

Fuel and fuel vapors are highly flammable. Never use fuel where a spark or flame may be present. Never use fuel where a potential source of ignition could occur. (Examples include: hot water or space heaters, clothes dryer, electric motors, etc.)

Keep flames and sparks away from engine and fuel to prevent fires. Fuel fires spread very quickly and are highly explosive.

Prevention of Gasoline Fires

Never fill your fuel tank with fuel indoors. (Examples include: basement, garage, barn, shed, house, porch, etc.)

Always fill fuel tank outside in a well ventilated area.

Never remove the fuel cap or add fuel with the engine running. Stop engine and allow to cool before filling.

Never drain fuel from engine in an enclosed area.

Always wipe up excess (spilled) fuel from engine before starting. Clean up spilled fuel immediately.

Allow spilled fuel to dry, after wiping and before starting.

Allow fuel fumes/vapors to escape from the area before starting engine.

Test the fuel cap for proper installation before starting and using engine.

Always run the engine with fuel cap properly installed on the engine and gas cap vent screw unscrewed.

Replace fuel cap that allows gas to spill or leak.

Never smoke while refilling engine fuel tank.

Prevent fire and explosion caused by static electric discharge. Use only non-metal, portable fuel containers approved by the Underwriter's Laboratory (U.L.) or the American Society for Testing & Materials (ASTM).

Do not store engine with fuel in fuel tank indoors. Fuel and fuel vapors are highly explosive.

When storing, screw down gas cap vent screw tightly.

Never pour fuel from engine fuel tank.

Never siphon fuel by mouth to drain fuel tank.

Always have an adult fill the fuel tank.

Never allow an adult or anyone under the influence of drugs or alcohol to fill engine.

Never allow children to fill the engine.

BURNS AND FIRES

The muffler, muffler guard and other parts of the engine become extremely hot during the operation of the engine. These parts remain extremely hot after the engine has stopped.

Prevention of Burns and Fires

Never remove the muffler guard from the engine.

Never touch the muffler guard because it is extremely hot and will cause severe burns.

Never touch parts of the engine that become hot after operation.

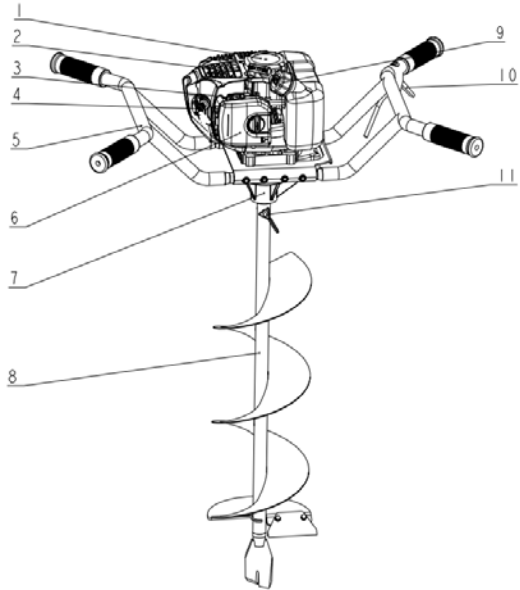
Always keep materials and debris away from muffler guard and other hot parts of the engine to avoid fires.

CAUTION

HOT GASES ARE A NORMAL BY-PRODUCT OF A FUNCTIONING CATALYTIC CONVERTER. FOLLOW SAFETY INSTRUCTIONS TO PREVENT BURNS AND FIRES.

PARTS LOCATION:

1. Recoil starter
2. Muffler
3. Choke lever
4. Sparkplug
5. Handle
6. Air filter
7. Transmission complete
8. Auger
9. Fuel tank cap
10. Assembly Trigger
11. Type D Pin



OPERATION

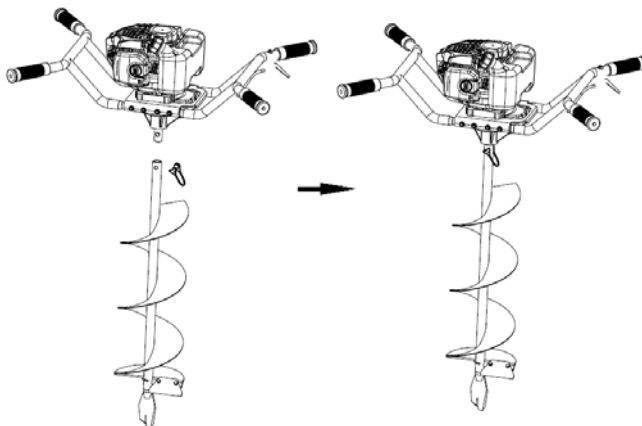
Assembly before use:

1. To Assemble Handles

- Insert handle with throttle hole on fuel tank side. Attach using 4 bolts, and nuts.
- Route throttle cable below saddle, and attach throttle lever to handle using Phillips head screw driver.
- Zip tie throttle cable using provided zip tips.
- Attach remaining handle using 4 bolts, and nuts.



2. Set the auger on the output shaft, insert the type D pin, then lock it .



PREPARING ENGINE FOR STARTING

GAS AND OIL QUALITY

To operate the engine, we recommend using quality 2 cycle oil to ensure that the engine operates correctly throughout the life of the engine. Use unleaded regular gas only.

Mixture

Run earth auger with a 50:1 ratio

GAS	OIL	RATIO
1 gallon	2.5 ounces	50:1
2 gallon	5 ounces	50:1
5 gallon	13 ounces	50:1

MIXING FUEL AND FILLING GAS TANK

Mixing Fuel

Fuel must be mixed in a container outside in a well ventilated area.

Mix 37 ounces gas with 0.74 oz. 2-cycle engine oil (50:1), in separate container, then pour in gas tank. Screw container cap on straight and tight.

Shake the container to mix fuel and oil.

Unscrew gas cap slowly to vent, add the remainder of fuel requirements.

Wipe away any spilled fuel or oil and allow to evaporate before moving or transporting.

CAUTION

DO NOT ALTER/MODIFY ENGINE OR AUGER:

AVOID INJURY! NEVER ALTER OR MODIFY THE ENGINE FROM THE FACTORY. SERIOUS INJURY OR DEATH MAY OCCUR IF ENGINE IS MODIFIED OR ALTERED.

AVOID INJURY! WHEN WORKING ON OR REPLACING PARTS FOR THE ENGINE OR AUGER YOU MUST ALWAYS DISCONNECT SPARK PLUG WIRE FROM THE SPARK PLUG AND KEEP IT AWAY FROM THE SPARK PLUG.

AVOID INJURY! ALWAYS WEAR HEARING PROTECTION WHILE OPERATION ENGINE.

AVOID INJURY! PLEASE DO NOT START YOUR EARTH AUGER UNTIL YOU HAVE READ THE PREVIOUS SECTION OF THIS MANUAL. IF YOU HAVE READ THESE, FOLLOW THE STEPS BELOW TO START YOUR EARTH AUGER.

AVOID INJURY! NEVER STORE ENGINE WITH GAS IN THE TANK INDOORS. FUEL AND FUEL VAPORS ARE HIGHLY FLAMMABLE.

AVOID INJURY! NEVER MIX FUEL AND OIL DIRECTLY IN ENGINE GAS TANK. USE ONLY NON-METAL, PORTABLE FUEL CONTAINERS APPROVED BY THE UNDERWRITER'S LABORATORY (U.L.) OR THE AMERICAN SOCIETY FOR TESTING & MATERIALS (ASTM).

AVOID INJURY! AN ADULT MUST ALWAYS HANDLE AND FILL THE ENGINE WITH FUEL.

AVOID INJURY! ALWAYS HANDLE FUEL IN A WELL VENTILATED AREA, OUTDOORS, AWAY FROM FLAMES OR SPARKS.

IMPORTANT

THIS ENGINE USES A GAS/OIL MIXTURE. DO NOT RUN ON STRAIGHT GAS ONLY, ENGINE DAMAGE WILL RESULT.

Filling Gas Tank

Shut-off engine and allow engine to completely cool before refilling the gas tank.

Move to a well ventilated area, outdoors, away from flames and sparks.

Clean debris from area around the gas cap.

Loosen gas cap slowly. Carefully add fuel without spilling.

Do not fill gas tank completely full, allow space for fuel to expand.

Immediately replace gas cap and tighten. Wipe off spilled fuel and allow to dry before starting engine.

NORMAL OPERATION

The clutch will transfer maximum power after about two hours of normal operation.

During this break-in period clutch slippage may occur. The clutch should be kept free of oil or other moisture for efficient operation.

Drill holes without placing excessive body weight on the unit. The auger operates most efficiently with a shaving action caused by the weight of the unit itself.

Never run engine indoors. Exhaust fumes are deadly.

Do not use an earth auger in the ice.

To attach auger to power head, align hole at top of auger shaft with the output shaft hole.

Insert the pin shaft, then lock it with cotter pin.

NOTE: The ends of the bolt should be flush with the auger collar. Bolt head and thread end should never go beyond earth collar.

USING THE SCREW TYPE, MANUAL VENTING GAS CAP

Your earth auger is equipped with a screw type, manual venting gas cap.

Before starting the engine, turn the screw in the top of the gas cap all the way open (counterclockwise) to its venting position. To ensure that gas will not spill during use, check that the gas cap is screwed on tightly and the gas cap screw is in the venting position.

After using the power earth auger and before putting away or transporting it in a vehicle, screw the gas cap screw on (clockwise) tightly. This will prevent gas from leaking during storage. The gas cap will not leak gas during storage if the gas cap is tight and the screw at the top is tight.

NOTE: When storing unit in an upright position for pro-longed periods of time in warm weather, vent gas cap to prevent gas from leaking from carburetor.

CAUTION

AVOID INJURY! ALWAYS HANDLE FUEL IN A WELL VENTILATED AREA, OUTDOORS, AWAY FROM FLAMES OR SPARKS.

AVOID INJURY! DO NOT START ENGINE IF FUEL IS SPILLED. WIPE OFF EXCESS FUEL AND ALLOW TO DRY. REMOVE ENGINE FROM AREA TO AVOID SPARKS.

STARTING AND STOPPING ENGINE

Move engine to a well ventilated area, outdoors, to prevent carbon monoxide poisoning.

Move to an area away from flames or sparks, to avoid ignition of vapors if present.

Remove all debris from air cleaner holes and gas cap to ensure proper air flow.

COLD ENGINE START

Starting engine for first time or after engine has cooled of after running out of fuel.

Move the On/Off Ignition Switch to the “ON” position.

Move the choke lever to “CLOSED TO START” position.

Press the primer bulb 6 times.

Pull the recoil starter handle out slowly, until you can feel drag against you, then pull rapidly, until the engine starts and runs.

When engine starts, move choke lever to “WARM UP” position until engine runs smoothly.

Then move choke lever to “OPEN TO RUN” position.

If engine fails to start, wait 2 minutes and repeat steps above.

NOTE: After engine starts running, grasp the recoil starter handle and let it return to its original position slowly. Don't let go of the handle and let it retract.

WARM ENGINE START

Move the On/Off Ignition Switch to the “ON” position.

Move the choke lever to “OPEN TO RUN” position.

Pull the recoil starter handle sharply until the engine starts and runs.

CAUTION

AVOID INJURY! ALWAYS HANDLE FUEL IN A WELL VENTILATED AREA, OUTDOORS, AWAY FROM ALAMES OR SPARKS.

AVOID INJURY! DO NOT START ENGINE IF FUEL IS SPILLED. WIPE OFF EXCESS FUEL AND ALLOW TO DRY. REMOVE ENGINE FROM AREA TO AVOID SPARKS.

AVOID INJURY! IF AUGER IS MOUNTED TO ENGINE, ALL SAFETY GUARDS MUST BE SECURELY ON TO AVOID SERIOUS INJURY.

AVOID INJURY! STARTER ROPE CAN CAUSE AN UNANTICIPATED JERK TOWARDS ENGINE. PLEASE FOLLOW INSTRUCTIONS TO AVOID INJURY.

AVOID INJURY! NEVER LEAVE ENGINE RUNNING WHILE UNATTENDED. TURN OFF AFTER EVERY USE.

AVOID INJURY! NEVER CARRY POWERHEAD AND AUGER BETWEEN HOLES WHILE ENGINE IS RUNNING.

WARNING

AVOID INJURY! MAKE SURE THE UNIT IS IN A STABLE POSITION BEFORE PULLING THE STARTERHANDLE.

AVOID INJURY! WHEN THE UNIT STARTS TO FIRE OR RUN, RELEASE THE THROTTLE CONTROL MOMENTARILY WITH YOUR RIGHT HAND AND RETURN YOUR LEFT HAND TO THE HANDLEBAR POSITION TO MAINTAIN CONTROL AND STABILITY OF THE UNIT WITH BOTH HANDS.

DO NOT attempt to start engine in the following ways:

DO NOT use starting fluid .DO NOT spray flammable liquids or vapors into air cleaner, carburetor or spark plug chamber.

DO NOT remove spark plug and pull on starter rope. Flammable fuel can spray out & ignite from a spark from spark plug.

SPECIFICATION

ITEM #	AUGER52
Engine Mode	AUGER52
Engine Type	Forced Air-cooled 2-Stroke
Displacement	52cc
Rated Power	1.2kW
Fuel	Gas/Oil Mixture (50:1)
Fuel Tank Capacity	37.2 ounces
Ignition System	TCI
Starting System	Recoil
Gear Ratio	30:1
Max. Engine Speed	8500+/- 1000 r/min
Clutch Engine Speed	4200 +/- 400 r/min
Idle Engine Speed	3100 +/- 400 r/min
Auger Speed	0-280 r/min
Spark plug type/ model	L6

EPA	Approved
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Specifications subject to change without prior notice.

MAINTENANCE AND STORAGE

AUGER MAINTENANCE

The gear case has 2.8 oz. of grease installed at the factory. It is recommended that once a year the gear case be split and the grease level checked. Add grease only if level of grease is below top of the gears. DO NOT OVERFILL.

Keep all screws, nuts, and bolts tight.

For cold weather operation, store the unit in a cool environment. Transferring the unit from a warm to a cold place can cause the buildup of harmful condensation.

If blade performance decreases, turn unit off and disconnect spark plug wire. Carefully inspect cutting edge of blade for any signs of wear. If blades show any of these signs, they need to be sharpened or replaced.

ENGINE MAINTENANCE

Cooling Fins

Cooling fins, air inlets and linkages must be free from any debris before each use.

Air Filter

Never run engine without air cleaner properly installed. Added wear and engine failure may occur if air cleaner is not installed. Service air cleaner every 3 months or after 20 hours of operation. Clean filter daily in extremely dusty conditions

Steps for Cleaning Air Filter

Wash in warm water with mild soap until dirt and debris are removed. Press filter when washing, do not twist.

Rinse in warm water until soap and dirt are removed.

Dry filter by wrapping in a clean cloth and pressing filter until it is dry.

Apply oil to the entire filter.

Remove excess oil.

Attach the filter and air cleaner cover to the engine.

CAUTION

AVOID INJURY! ENGINE MUST BE TURNED OFF AND COOL, AND SPARK PLUG WIRE MUST BE REMOVED FROM SPARK PLUG BEFORE CHECKING AND ADJUSTING ENGINE OR EQUIPMENT.

AVOID INJURY! TEMPERATURE OF MUFFLER AND NEARBY AREAS MAY EXCEED 150F (65C) AVOID THE SEAREAS.

AVOID INJURY! CHECK AUGER OFTEN FOR LOSSE NUTS AND BOLTS. KEEP THESE ITEMS TIGHTENED.

AVOID INJURY! NEVER STORE ENGINE WITH FUEL IN THE TANK INSIDE A BUILDING.

POTENTIAL SPARKS MAY BE PRESENT FOR IGNITION OFF UELAND FUEL VAPORS. AVOID INJURY! AN ADULT MUST ALWAYS DO MAINTENANCE AND REPAIR ON ENGINE AND AUGER.

AVOID INJURY! ENGINE MUST BE SHUT-OFF, COOL, AND SPARK PLUG WIRE REMOVED BEFORE ANYREPAIRORMAINTENANCECANBE DONE.

Spark Plug

Recommended spark plug is L6, which cross references to Champion CJ8.

Check spark plug every 50 operating hours

Disconnect the spark plug cap, and clean any debris from around the spark plug area. Remove spark plug and replace if any of the following occur; pitted electrodes, burned electrodes, cracked porcelain, or deposits around electrodes.

After analysis, seat spark plug and tighten with spark plug wrench.

Reinstall original spark plug, tighten additional 1/2 turn.

Installing new spark plug, adjust spark plug gap to .030" and tighten additional 1/8–1/4 turn.

NOTE: Loose spark plug may overheat and damage engine. Over tightened spark plug may damage threads in the cylinder head.

Carburetor

Never tamper with factory setting of the carburetor.

TRANSPORTING YOUR AUGER

Never transport engine inside an enclosed space or vehicle. Fuel or fuel vapors may ignite causing serious injury or death.

If fuel is present in the fuel tank, transport it in an open vehicle in an upright position.

If an enclosed vehicle must be used, remove gas into an approved red fuel container.

DO NOT siphon by mouth.

Run engine to use up the fuel in the carburetor and fuel tank. Always run engine in a well ventilated area.

Wipe away any spilled fuel from engine and earth auger. Allow to dry.

LONG TERM STORAGE

If your auger will not be used for more than one month, prepare it for long term storage.

Steps for Long Term Storage

Add fuel stabilizer according to manufacturer's instructions.

Run engine for 10-15 minutes to ensure that the stabilizer reaches the carburetor.

Remove the remainder of the fuel from the gas tank into an approved fuel container.

Remove auger from power head and apply a thin layer of grease to the output shaft.

Store auger and power head (engine) in a vertical position.

Remove all debris from auger and power head (engine).

CAUTION

AVOID INJURY! TO AVOID INJURY OR DEATH, NEVER SIPHON FUEL BY MOUTH.

AVOID INJURY! NEVER STORE EARTH AUGER WITH FUEL IN THE GAS TANK INSIDE AN ENCLOSED AREA OR BUILDING.

TO PREVENT ACCIDENTAL STARTING:

AVOID INJURY! ENGINE MUST BE TURNED OFF AND COOL, AND SPARK PLUG WIRE MUST BE REMOVED FROM SPARK PLUG BEFORE CHECKING AND ADJUSTING ENGINE OR EQUIPMENT.

AVOID INJURY! AN ADULT MUST ALWAYS DO MAINTENANCE AND REPAIR ON ENGINE AND AUGER.

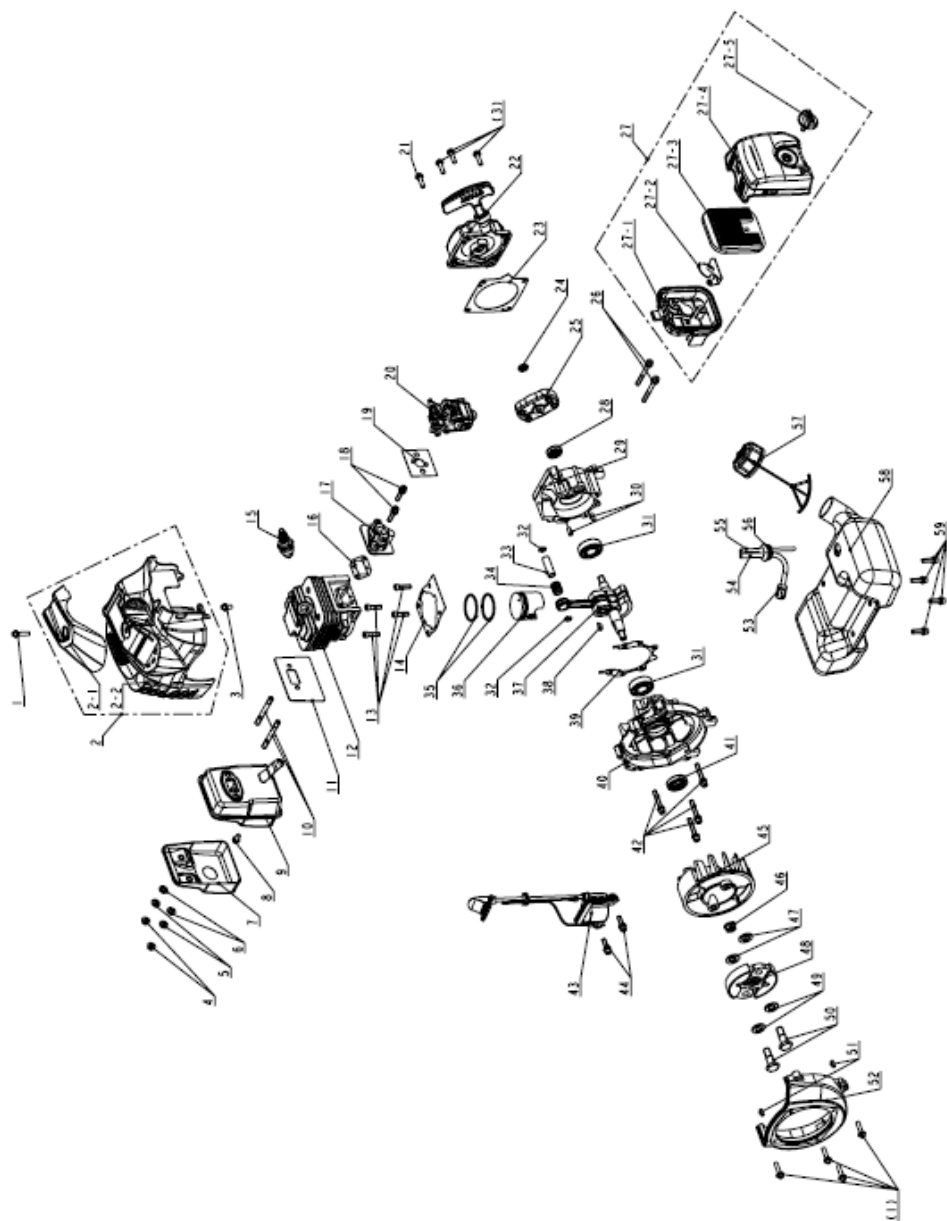
AVOID INJURY! ENGINE MUST BE SHUT-OFF, COOL, AND SPARK PLUG WIRE REMOVED BEFORE ANY REPAIR OR MAINTENANCE CAN BE DONE.

TROUBLESHOOTING

PROBLEM	POSSIBLECAUSE	REMEDY/ ACTION
Engine will not start	1. Power switch off	1. Flip switch to ON position
	2. Spark plug wire disconnected	2. Connect spark plug wire to spark plug
	3. Out of fuel	3. Refuel
	4. Spark plug wet, faulty or improperly gapped	4. Clean, replace or gap spark plug
	5. Throttle control not held wide open	5. Hold throttle control wide open then pull recoil handle
	6. Fuel line hose not positioned in bottom of gas tank	6. Push fuel line down into fuel in gas tank
Engine runs rough, floods	1. Dirty air filter	1. Clean or replace air filter
	2. Choke partially engaged	2. Turn off choke
	3. Carburetor out of adjustment	3. Call customer service
Auger cuts slowly	1. Dull blade	1. Buy new blade, or have blade sharpened at factory
	2. Damaged fish tail point	2. Replace fish tail point

ROBLEM	POSSIBLECAUSE	REMEDY/ ACTION
Engine is hard to start	1. Stale fuel	1.Drain old fuel and replace with fresh. Use gas stabilizer at end of season
	2. Spark plug wire loose	2.Make sure spark wire is securely attached to spark plug
	3. Dirty carburetor	3.Clean carburetor, use gas stabilizer, new gas can
	4.Throttle control not held wide open	4.Prime unit 3 more times, then hold throttle wide open when pulling recoil handle
Engine misses or lacks power	1. Clogged gas tank	1.Remove and clean
	2. Clogged air filter	2.Clean or replace
	3. Carburetor out of adjustment or bad	3.Call customer service
	4. Spark plug wet, faulty or improperly gapped	4.Clean, replace or gap spark plug
Engine runs, then quits	1.Gas cap not venting	1.Open manual venting gas cap screw all the way open (counter clockwise)
	2. Plugged fuel filter	2.Clean or replace
	3. Carburetor out of adjustment or bad	3. Call customer service
Engine revs too high	1. Carburetor out of adjustment	1. Call customer service
Auger turns at idle	1.Idle speed too high	1. Adjust idle speed lower
	2.Broken clutch spring	2. Replace spring
Auger turns, but has no power	1.Choke on	1.Turn off choke after engine is running
	2.Carburetor out of adjustment	2. Call customer service
	3.Broken transmission	3. Call customer service
	4.Worn clutch shoes	4.Replace clutch shoes and spring
	5.Worn engine lower seat	5. Call customer service
Auger jumps	1. Blade damaged	1.Replace with new blade

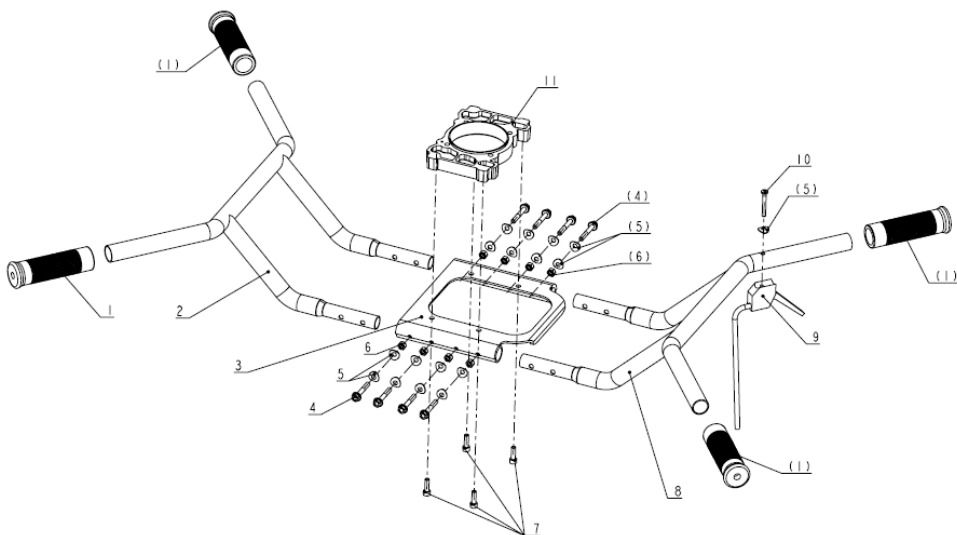
PARTS DIAGRAM



PART LIST

NO.	PART NO.	DESCRIPTION	QTY	NO.	PART NO.	DESCRIPTION	QTY
1	B13080502321	Bolt Assy, M5x23	5	28	31050101001000	Oil Seal,12x22x7	1
2	27060104039000	Cylinder Shield Assy	1	29	31100104001000	Right Crankcase	1
2-1	37150104011000	Cylinder Shield	1	30	B09030501200	Pin,B5x12	2
2-2	37160104011000	Cylinder Shield,Cover	1	31	B12016020200	Bearing,6202	2
3	B13080501621	Bolt Assy, M5x16	4	32	34040104001000	Circlip,Piston Pin	2
4	B04280600026	Nut,M6	2	33	34020107001000	Piston Pin	1
5	B07000006041	Spring Washer, 6	2	34	34010107001000	Needle Bearing,K10x14x15	1
6	B07010006041	Washer, 6	2	35	34030107001000	Piston Ring	2
7	36020104010000	Muffler Cover	1	36	34040107001000	Piston	1
8	B13080501221	Bolt Assy, M5x12	1	37	24020107001000	Crankshaft Connecting Rod Ass'y	1
9	27060104011000	Muffler Ass'y	1	38	B11210305013	Key,3x5x13	1
10	B03070606381	Stud Bolt,AM6x63	2	39	31030104001000	Gasket, Crankcase	1
11	32050104001000	Gasket, Muffler	1	40	31090104001000	Left Crankcase	1
12	32010107001000	Cylinder	1	41	31010104001000	Oil Seal,15x30x7	1
13	B02040502061	Bolt,M5x20	4	42	B13360503561	Bolt Assy, M5x35	4
14	32020107001000	Gasket, Cylinder	1	43	28080104001002	Ignition Coil	1
15	22030404001000	Spark Plug,L6	1	44	B13360502061	Bolt Assy, M5x20	2
16	32020104001001	Gasket, Cylinder Intake	1	45	28050104001000	Rotor Assy	1
17	22020104001000	Isolator Block, Carburetor	1	46	B04280800025	Nut,M8	1
18	B13360502561	Bolt Assy, M5x20	2	47	35030104001000	Washer	2
19	32010104001001	Gasket, Carburetor	1	48	25010104001002	Clutch Rotor Assy	1
20	27030107001000	Carburetor Ass'y	1	49	33150132001000	Washer, Spring	2
21	B13080502021	Bolt Assy, M5x20	1	50	35010104001000	Bolt,Shoulder	2
22	26050104011000	Starter Ass'y	1	51	B09030401000	Pin,B4x10	2
23	36090104001000	Gasket, Recoil Starter	1	52	31070104001000	Magneto Cover	1
24	36030104001000	Nut	1	53	27100104001000	Fuel Filter	1
25	26060104011000	Starting Jaw Assy	1	54	37100104001001	Fuel Line	1
26	B13360505061	Bolt Assy, M5x50	2	55	37110104001001	Fuel Line ,Short	1
27	27050104039000	Air Filter Ass'y	1	56	37120104001000	Seal, Fuel Lines	1
27-1	37100104011000	Housing, Air Filter	1	57	27090104001000	Fuel Cap	1
27-2	37110104011000	Bracket, Air Filter	1	58	27080104012001	Fuel Tank	1
27-3	37120104011000	Air Filter and Mounting Plate	1	59	B13360501861	Bolt Assy, M5x18	4
27-4	37130104011000	Cover, Air Filter	1				
27-5	37140104011000	Knob, Screw	1				

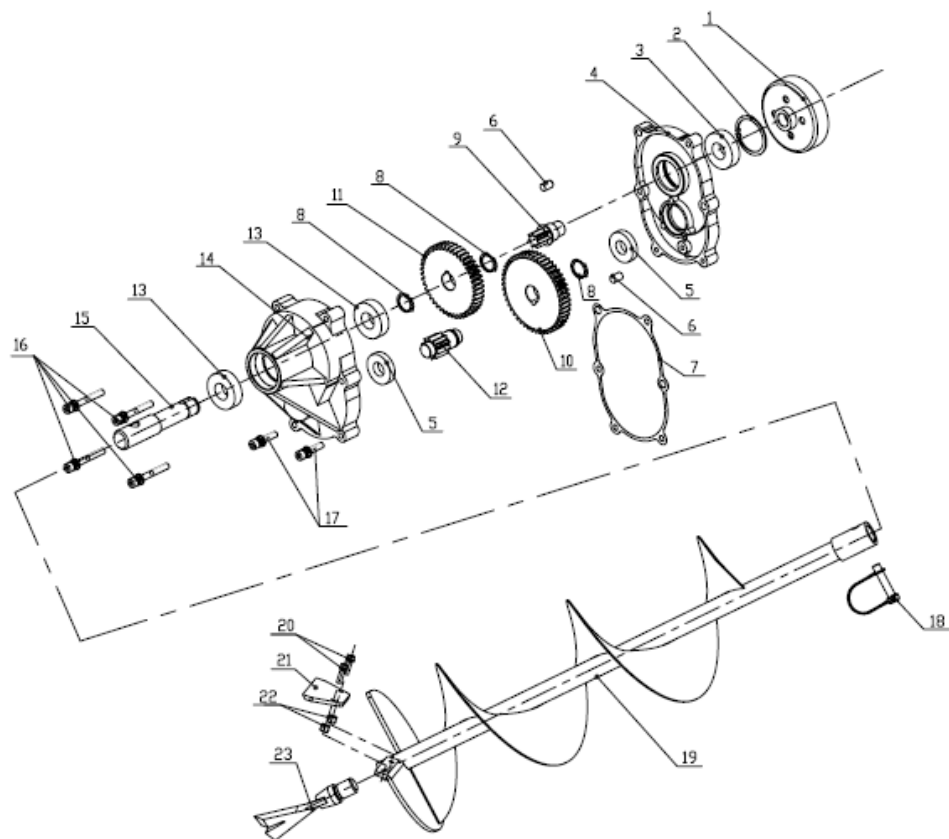
PARTS DIAGRAM



PART LIST

NO.	PART NO.	DESCRIPTION	QTY
1	39190860105000	Handlebar Grip	4
2	39170860105001	Handle Bar,Left	1
3	39200860105001	Handrail Support Plate	1
4	B01310604065	Bolt,M6×40	8
5	30220860102020	Boat Washer,Φ6.5*Φ18*1	17
6	B04340600045	Mut,M6	8
7	B02040602061	Bolt,M6*20	4
8	39180860105001	Handle Bar,Right	1
9	20070860103000	Throttle Cable And Trigger Assy	1
10	B02210504026	Bolt,M5×40	1
11	30010860102000	Gear Box Seat	1

PARTS DIAGRAM



PART LIST

NO.	PART NO.	DESCRIPTION	QTY
1	30130860102020	Clutch Drum	1
2	B08060004211	Snap Ring,Φ42	1
3	30140860102020	Ball Bearing Double Lip R12-2RS	1
4	39270860103000	Gear Case Top	1
5	30150860102020	Ball Bearing R10	2
6	B09030501000	Pin,Φ5*10	2
7	30070860102020	Gasket	1
8	B08080001911	Snap Ring,Φ19	3
9	30080860102020	Input Shaft,7T	1
10	30090860102020	Gear,48T	1
11	30100860102020	Gear,44T	1
12	30110860102020	Gear,10T	1
13	30200860102020	Ball Bearing Double Lip 6004-2RS	2
14	39280860103000	Gear Case Bottom	1
15	39300860103000	Output Shaft	1
16	30210860102020	Combination Bolt,M6*50	4
17	30230860102020	Combination Bolt,M6*35	2
18	39350860103000	D Type Pin	1
19	20030860103001	Auger	1
20	B01310601865	Bolt,M6×18	2
21	DZ200.03.01-04	Cutter	1
22	B04410600045	Mut,M6	2
23	39340860103000	Fishtail Bit	1

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.

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.²⁴

(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:25

(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.

ASSEMBLY INSTRUCTIONS



09/2021