

BRAVE**MBRP750DP3**

ITEM NUMBERS: BRP750DP3

MANUAL SERIAL TAG HERE

Owner's Manual

Brave 3" Diaphragm Water Pump

WARNING

Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.

- **WARNING:** Wear appropriate protective gear. This list includes, but is not limited to:
 - safety glasses, protective boots with slip resistant soles, gloves, hearing protection.
- **WARNING:** Keep guards in place and in working order. Never operate the product without the guards in place.
- **WARNING:** LETHAL EXHAUST GAS! An internal combustion engine discharges carbon monoxide, which is a poisonous and odorless invisible gas. Death or serious illness may result if inhaled. Operate only in an area with good ventilation.
- **DANGER:** Do not smoke when refueling.
- **WARNING:** Do not use pump in explosive atmosphere.
- **WARNING:** Do not pump volatile or flammable liquids such as gasoline, fuel oil, kerosene, etc.
- **CAUTION:** Do not attempt to operate pump, if any parts are missing or damaged.
- **CAUTION:** For proper handling techniques and cautions when pumping certain chemicals, contact your chemical supplier or local agencies (fire dept etc)
- **CAUTION:** The engine is hot enough to cause injury, do not touch the exterior of the engine, especially the muffler and surrounding area.
- **WARNING:** Even though this unit will operate with minimal supervision, it should not be left operating by itself. Depending on the application and area unit is operating (high traffic, people in area, etc.) will dictate the necessity of having someone watching over the unit.
- **CAUTION:** Do not allow pump to be located in freezing or colder weather. Damage to pump will result.
- **CAUTION:** Maximum discharge head is 25 feet or 10.9 PSI. Operation over this head or pressure will cause pump to stall and/or gearbox damage.
- **CAUTION:** Do not control discharge capacity with a valve or similar device.
- **CAUTION:** If pump has stopped or stalled for any unknown reason, clean out pump cavity thoroughly. Failure to comply with the "caution" could result in damage to crank, plunger arm or other parts of assembly.

STOP!

ADD OIL TO ENGINE BEFORE USING: Engine is shipped without oil. **DO NOT** start engine without first adding oil.

INSPECT COMPONENTS: Closely inspect to make sure no components are missing or damaged.

Any Questions, Comments, Problems or Parts Orders
Call Brave Support 1-800-350-8739

Please read and save this Owner's Manual. Read this manual carefully before attempting to operate or maintain this pump. Protect yourself and others by observing all safety information. Failure to comply with the safety instructions accompanying this product could result in personal injury and/or property damage! Retain instructions for future reference. Brave reserves the right to discontinue any model or change specifications at any time without incurring any obligation.

Periodic maintenance and inspection is required on all pumps to ensure proper operation. Unit must be clear of debris and sediment. Inspect for leaks and loose bolts. Failure to do so voids warranty.

Diaphragm Pumps

DESCRIPTION

This diaphragm pump is a high capacity, self-priming (to 25 ft. lift), portable unit shipped completely assembled (except for handle). The pumps are used for operation with fluids mixed with abrasive solids such as sand, silt, mud, sludge and waste. Not for use with pumping cement or mortar. Handles liquids from 40° to 180° F (4° to 82 ° C). Pump is capable of handling solids up to 1-5/8" diameter. For use with water and other non-flammable fluids compatible with pump component materials.

Model	Engine Type	Material	Diaphragm	Check Valve	Gear Box	Bearings	NPT
BRP750DP3	Honda GX120	Aluminum	Thermoplastic/TPE	Neoprene	Oil Bath	Needle	3"

UNPACKING

After unpacking the unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing or damaged parts.

Specific Safety Information for Gasoline Engine Driven Pumps

1. Carefully read the instruction manuals supplied by the engine manufacturer before attempting to assemble, disassemble or operate the engine or any other part. The "Warning" and "Caution" statements in this manual signal potentially hazardous conditions to the operator or equipment. Know when these conditions can exist. Take necessary steps to protect personnel, as well as equipment.

▲ WARNING

Gasoline is a highly combustible fuel. Use it with care! The improper use, handling and/or storage of gasoline can be dangerous. Help prevent accidents by following these safety rules:

- a. Use gasoline only as a fuel, never as a cleaning fluid.
- b. Always use an approved container to hold or store gasoline. Never store gasoline in familiar containers such as milk gallons or soda pop bottles.
- c. Never store gasoline near a heater or an open flame.
- d. When storing or using gasoline, make sure container is out of the reach of children.
- e. Never add gasoline to a running or hot engine. Spilled gasoline on a hot engine may cause a fire or an explosion. Fill gasoline tank outdoors and wipe up any spills.
- f. Have a fire extinguisher nearby. Be sure extinguisher is in operating condition – check the pressure gauge or indicator. Be familiar with its proper use. Consult the local fire

- g. department for the correct type of extinguisher for your application. Extinguishers rated ABC by the National Fire Protection Association are appropriate for all applications. On permanent installations, be sure all fuel supplies have a positive shutoff valve. Fuel lines must be of steel piping, adequately secured and free from leaks. Do not use copper piping on flexible lines as copper becomes hardened and brittle and will break. Use black pipe on natural gas or gaseous fuels, but not on gasoline or diesel fuels. Piping at the engine should be a suitable flexible line that is compatible with the fluid.

Positively no smoking!

2. Check engine oil, fuel levels and gear box oil levels before initial startup each day. Stay away from moving parts due to the danger of becoming caught in moving parts. Avoid loose jackets, shirts, sleeves and ties. Make sure all nuts and bolts are secure. Keep power shields and guards in place. If adjustment MUST be made while the unit is running, use extreme caution around hot manifolds, moving parts, etc.
3. Do not work with this equipment when mentally or physically fatigued.
4. Be careful not to touch the exterior of the engine, especially the muffler and the area around it. It is hot enough to be painful or cause injury.
5. To prevent accidental starting, always remove the spark plug or disconnect and ground the spark plug wire before working on the engine or the equipment driven by the engine.
6. **DO NOT RUN THE ENGINE IN AN ENCLOSED AREA!!** Exhaust gases contain carbon monoxide, which is an odorless and deadly gas that will cause death if breathed too long.

Diaphragm Pumps

General Safety Information (All Units)

1. Know the pump application, limitations and potential hazards.

▲ WARNING

Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, or kerosene, etc. Do not use in flammable and/or explosive atmospheres. Pump should only be used with liquids compatible with pump component materials. Failure to follow this warning can result in personal injury and/or property damage.

2. Provide adequate protection and guarding around moving parts.
3. Release all pressure within the system before servicing any component.
4. Drain all liquids from the system before servicing.
5. Secure the discharge line before starting the pump. An unsecured discharge line will whip, possibly causing personal injury and/or property damage.
6. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
7. Periodically inspect pump and system components. Perform routine maintenance as required (see Maintenance Section).
8. Provide a means of pressure relief for pumps whose discharge line can be shut off or obstructed.
9. **Personal Safety:**
 - a. Wear safety glasses at all times when working with pumps.
 - b. Wear a face shield and proper apparel when pumping hazardous chemicals.
 - c. Keep work area clean, uncluttered and properly lighted.
 - d. Keep visitors at a safe distance from the work area.

ASSEMBLY

HANDLE ON 3" PUMP (Refer to Figure A)

- a. Remove two bolts from front holes in gear box, mounting feet base (Ref. No. A6).
- b. Place handle 3354-116-90 on top and reinstall bolts and washers.
- c. Reinstall two hex bolts and washer assemblies, then tighten.

2. **ROTATING SUCTION/DISCHARGE PORTS (OPTIONAL)** (Refer to Figure A,W,P)

In some applications, it may be preferable to have suction/discharge ports rotated 90 degrees to be in line with driver. If so, proceed as follows:

- a. Remove four hex cap screws (Ref. No. A9), hex nut (Ref. No. A13) and washers (Ref. Nos. A11 & A12) from pump assembly to separate pump well (Ref. No. A3) from pump base (Ref. No. A8).
- b. Rotate pump well 90 degrees clockwise so that driver is positioned over top of discharge plate (Ref. No. W7).
- c. Be sure that pump well base and diaphragm (Ref. No. P17) are aligned properly with one another. Then, reinstall four hex cap screws, hex nuts and washer assemblies and tighten.

GEAR BOX OIL (Refer to Figure A,G)

3. Place pump on a level surface. Fill pump gear box (Ref. No. A1) with gear box oil before the pump is operated. Gear oil must meet requirements of API GL-5 and military specification MIL-L-2105B. Remove gear box housing fill plug (Ref. No. G6). Remove level plug (Ref. No. G5). Pour gear oil into gear box slowly until oil comes out of level plug.

Warranty on this unit is void unless the gear box is lubricated with appropriate gear oil listed above. DO NOT OVER FILL!

INSTALLATION

NOTE: In any installation where property damage can occur by pumps not operating due to power outages, discharge line freezing or any other reason, a backup system(s) and/or warning system(s) should be used.

1. Place the pump on a level, solid foundation, locating it as close to the liquid as possible, making the suction line as short and direct as possible.
2. Install pipe nipples (Ref. No. A36) so the smoother side of pipe end faces the suction and discharge hose.

▲ CAUTION

Maximum discharge head is 25 feet or 10.9 psi. Operation over this head or pressure will cause pump to stall and/or gearbox damage. Use only rigid hoses.

3. Attach suction piping to the suction inlet (Ref. No. W2) and discharge piping to the discharge outlet (Ref. No. W7). The suction line should be positioned such that there is a continual upward slope from the fluid source to the pump. Avoid using loops or sections of pipe or fittings, which might permit air to become trapped.

NOTE: If hose is used, be sure to use reinforced hose on both the suction and discharge. **DO NOT USE** canvas or similar collapsible materials. **NEVER USE PIPE REDUCER; PIPE SIZE MUST BE EQUAL TO OR LARGER THAN PUMP PORT SIZE.** Suction line must be airtight so that air cannot leak in and destroy priming vacuum. On a permanent installation where piping is used, always connect a piece of flexible hose between pump and piping so pump is free to move slightly.

4. It is advisable to use a strainer (Ref. No. W16) on the inlet end of the suction hose or pipe. A properly sized strainer is supplied with this unit and should be used at all times to prevent damage. Keep the strainer clean. If possible, suspend it to keep it from becoming clogged with muck, roots, debris or leaves. It is best to keep hose free of kinks as they will restrict flow and add excess loading to pump and gearing.
5. **GASOLINE ENGINE UNITS:** Follow all instructions in the engine manual before starting the engine. Fill engine with oil, gasoline, etc.
6. Input RPM (to pump) – Input RPM must be between 1750 and 2750 RPM. Final pump speed will be 40 strokes/min. with a 1750 RPM input and 60 strokes/min. with a 2750 RPM input.

Do not exceed 60 strokes per minute with the diaphragm pump.

OPERATION

Operate the diaphragm pump in an upright position only.

1. This diaphragm pump is capable of priming "dry" up to fifteen feet; it will prime much faster when it is filled with clean water through priming cap (Ref. No. W6). Primed, it can lift to 25 feet.

▲ CAUTION

Do not control discharge capacity with a valve or similar device.

CLEARING JAM-UP

If large solids or an accumulation of sand or other sediment becomes lodged in the pump well (Ref. No. A3) preventing the plunger arm (Ref. No. A2) from making a full stroke, the pump should be thoroughly cleaned as described in "If Pump Stalls" shown below. Refer to parts list and illustration for parts identification.

▲ CAUTION

Diaphragm Pumps

If pump has stopped or stalled for any unknown reason, clean out pump cavity thoroughly. Failure to comply with the "caution" could result in damage to crank (Ref. No. P5/P9), plunger arm (Ref. No. P1) or other parts of assembly.

1. IF PUMP STALLS:
 - a. Remove handle (Ref. No. A35).
 - b. Remove four bolts (Ref. No. A9 & A10).
 - c. Clean obstruction and all debris from pump well (Ref. No. A3).
 - d. Reassemble pump in reverse order of disassembly and return to service.
2. IF PLUNGER ARM (Ref. No. P1) SEIZES AND GEAR BOX OUTPUT SHAFT (Ref. No. G8) TURNS IN CRANK (Ref. No. P5):
 - a. Remove sheet metal guard (Ref. No. A4) by loosening hand knob screws (Ref. No. A5).
 - b. Disassemble pump and clean as described in steps (a) through (d) listed for stalled engine jam up.
 - c. Torque the crank lock screw (Ref. No. P6) to 70 foot pounds with an appropriate torque wrench (see Figure 3).

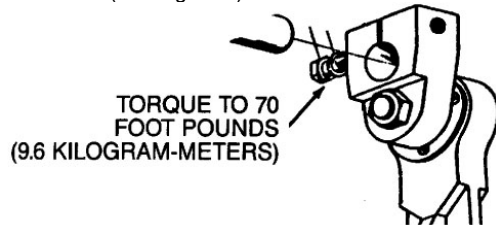


Figure 3

- d. Reassemble the pump in reverse order of disassembly and return to service.

⚠ WARNING

Pump jamming with an over-torqued lock screw may cause internal damage. Under torqueing may allow the output shaft to spin and wear parts necessitating replacement.

MAINTENANCE

⚠ WARNING

1. Check gear box oil level every 20 hours of operation or at least once a week; more often if any leakage is detected around the gear box. Change gearbox oil after the first 40 hours of operation. Fill to the oil level plug. Change gearbox oil every 350 hours of operation.
2. The plunger bearing (Ref. No. P3) must be greased (any automotive grease) after every 8 hours of use. This is done by rotating plunger bearing to the 12 o'clock position. At this point, grease fitting will be visible through hole in guard (Ref. No. A4). Bearing may be cleaned and kept well lubricated by pumping grease slowly into fitting until new grease oozes out between bearing and journal.
3. During freezing weather, be sure to drain the pump when it is not running. Remove discharge hose and tip unit towards discharge side.
4. Keep pump clean. After use with liquids containing foreign materials, flush with clean water.

REPLACEMENT OF FLAPPER VALVE

(Ref. No. W15)

1. Remove two bolts (Ref. No. W3) and remove suction priming chamber (Ref. No. W2). Replace flapper (Ref. No. W15) on flapper pin to locate on priming chamber.
2. Remove two bolts (Ref. No. W8) and remove discharge

plate (Ref. No. W7). Replace flapper valve on flapper pin to locate valve on pump well (Ref. No. W1).

REPLACEMENT OF DIAPHRAGM

(Ref. No. P13)

1. Remove sheet metal guard (Ref. No. A4) by loosening hand knob screws (Ref. No. A5).
2. Rotate pump until plunger arm (Ref. No. A2) is in the down position.
3. Remove handle (Ref. No. A35).
4. Remove pump well (Ref. No. A3) by removing screws, (Ref. No. A9/A10).
5. Remove diaphragm by removing three nuts (Ref. No. P12) from bolts (Ref. No. P11).
6. Replace diaphragm and reverse steps 1 through 5 for reassembly.

GEAR BOX OVERHAULING

A completely assembled gear box is available as a replacement part (Ref. No. G28).

DISASSEMBLY

1. Remove diaphragm (Ref. No. P13) as described in "Replacement of Diaphragm".
2. Remove crank (Ref. No. P5) by removing machine screw (Ref. No. P6). Use screwdriver in slot of crank to release clamp on output shaft (Ref. No. G8).
3. Drain oil from gear box by removing drain plug (Ref. No. G4).
4. Remove driver (Ref. Nos. A28/A32) from adapter (Ref. No. G26) by removing four bolts (Ref. No. A27) plus 4 additional bolts (Ref. No. A29) from engine mount bracket (Ref. No. A16) for gas driver models. Slide driver back from adapter until driver shaft disengages pinion (Ref. No. G20).
5. Remove adapter by removing four bolts (Ref. No. G27).
6. Remove gear box from pump base (Ref. No. A8) by removing four bolts (Ref. No. A9 & A10).
7. Remove pinion/bearing assembly (Ref. Nos. G15, G24, G20, G16) by pulling straight out. Use a slide hammer puller gripping in pinion groove.
8. Remove twelve bolts (Ref. No. G3) holding gear box halves (Ref. Nos. G1 & G2) together.
9. Carefully separate gearbox halves.
10. Remove gasket (Ref. No. G22).
11. Remove output shaft/bearing assembly (Ref. Nos. G8, G9, G12, G11, G12, G13) and idler pinion/bearing assembly (Ref. Nos. G13, G14, G17, G18, G19).
12. Remove output shaft oil seal (Ref. No. G23).
13. Remove bearings (Ref. Nos. G15 & G16) from ends of input pinion shaft (Ref. No. G20).
14. Remove bearings (Ref. Nos. G13 & G14) from ends of idler pinion shaft (Ref. No. G17).
15. Remove internal spur gear (Ref. No. G19) and key (Ref. No. G18) from idler pinion shaft.
16. Remove retaining ring (Ref. No. G10) and bearings (Ref. Nos. G12 & G13) from ends of output shaft (Ref. No. G8).
17. Remove output gear (Ref. No. G11) and key (Ref. No. G9) from output shaft.

REASSEMBLY

1. Assemble input pinion/bearing assembly, idler pinion/bearing assembly and output shaft/bearing assembly.
2. Install output shaft oil seal into gearbox output half. Lubricate lip seal.
3. Slide output shaft through lip seal. Start output bearing in bore in gear box output half. Position idler pinion bearing assembly in its bore in output half. Simultaneously press both assemblies into output half.

Diaphragm Pumps

4. Install gasket on output half.
5. Position gear box input half; align shaft bearings with bearing bores. Press gear box halves together, align pins in output half with pin bore in input half.
6. Secure halves together with twelve bolts.
7. Slide input pinion/bearing assembly into bore in gear box input half. Rotate pinion during installation to make sure gear teeth align with internal spur gear teeth.
8. Install O-ring (Ref. No. G25) on outside of pinion bearing.
9. Reassemble gear box to pump base with four bolts.
10. Reassemble adapter to gear box with four bolts.
11. Align driver shaft key (Ref. No. A26) with keyway in pinion. Slide driver into pinion, secure to adapter with four bolts (Ref. No. A27).
 - a. **(Gas engine only)** Attach engine to engine mount with four additional screw assemblies (Ref. No. A29).
12. Reassemble crank to output shaft as described under "Operation" section.
13. Replace diaphragm as described under "Replacement of Diaphragm" section.
14. Fill gear box with oil as described under "Assembly" section.
15. Pump should be checked daily, weekly, monthly for proper operation.

NOTE: Only qualified service personnel should attempt to repair this unit. Improper repair and/or assembly can cause pump damage, driver damage and/or an electrical shock hazard depending on model.

Diaphragm Pumps

Symptom	Possible Cause(s)	Corrective Action
Pump will not prime or retain prime after operating	<ol style="list-style-type: none"> 1. Air leak in suction line 2. Defective flapper valves 3. Clogged foot valve or strainer 4. No liquid in suction line 5. Material jammed in pump well 	<ol style="list-style-type: none"> 1. Repair or replace 2. Replace 3. Clean or replace 4. Fill suction line & pump with liquid 5. Clean (See Maintenance)
Flow rate is slow	<ol style="list-style-type: none"> 1. Incorrect driver speed 2. Piping is fouled or damaged 3. Clogged pump 4. Discharge line restricted or undersized 5. Collapsible discharge hose 6. Too many bends 7. Lines are too long 	<ol style="list-style-type: none"> 1. Increase speed (see Specifications) 2. Clean or replace 3. Clean 4. Flush out piping or replace 5. Replace with rigid or non-collapsible hose 6. Straighten hose 7. Shorten lines
Pump runs but no fluid	<ol style="list-style-type: none"> 1. Faulty suction piping 2. Pump located too far from fluid source 3. Gate valve closed 4. Clogged strainer 5. Discharge height too great 	<ol style="list-style-type: none"> 1. Replace 2. Place pump closer to source 3. Open gate valve 4. Clean or replace 5. Lower discharge height
Pump starts and stops pumping	<ol style="list-style-type: none"> 1. Leak in suction line 2. Leak in foot valve 3. Diaphragm has a crack or hole 4. Defective or clogged flapper valves 	<ol style="list-style-type: none"> 1. Repair 2. Repair or replace 3. Replace 4. Clean or replace
Excessive noise while pump in operation	<ol style="list-style-type: none"> 1. Pump not secured to firm foundation 2. Restricted suction line 	<ol style="list-style-type: none"> 1. Secure properly 2. Clean or correct
Pump stalls repeatedly or stops for no apparent reason	<ol style="list-style-type: none"> 1. Discharge height over 25 feet of head 2. Material jammed in pump well 	<ol style="list-style-type: none"> 1. Lower height (see Specifications) 2. Clean out pump well (See Operation & Maintenance section)

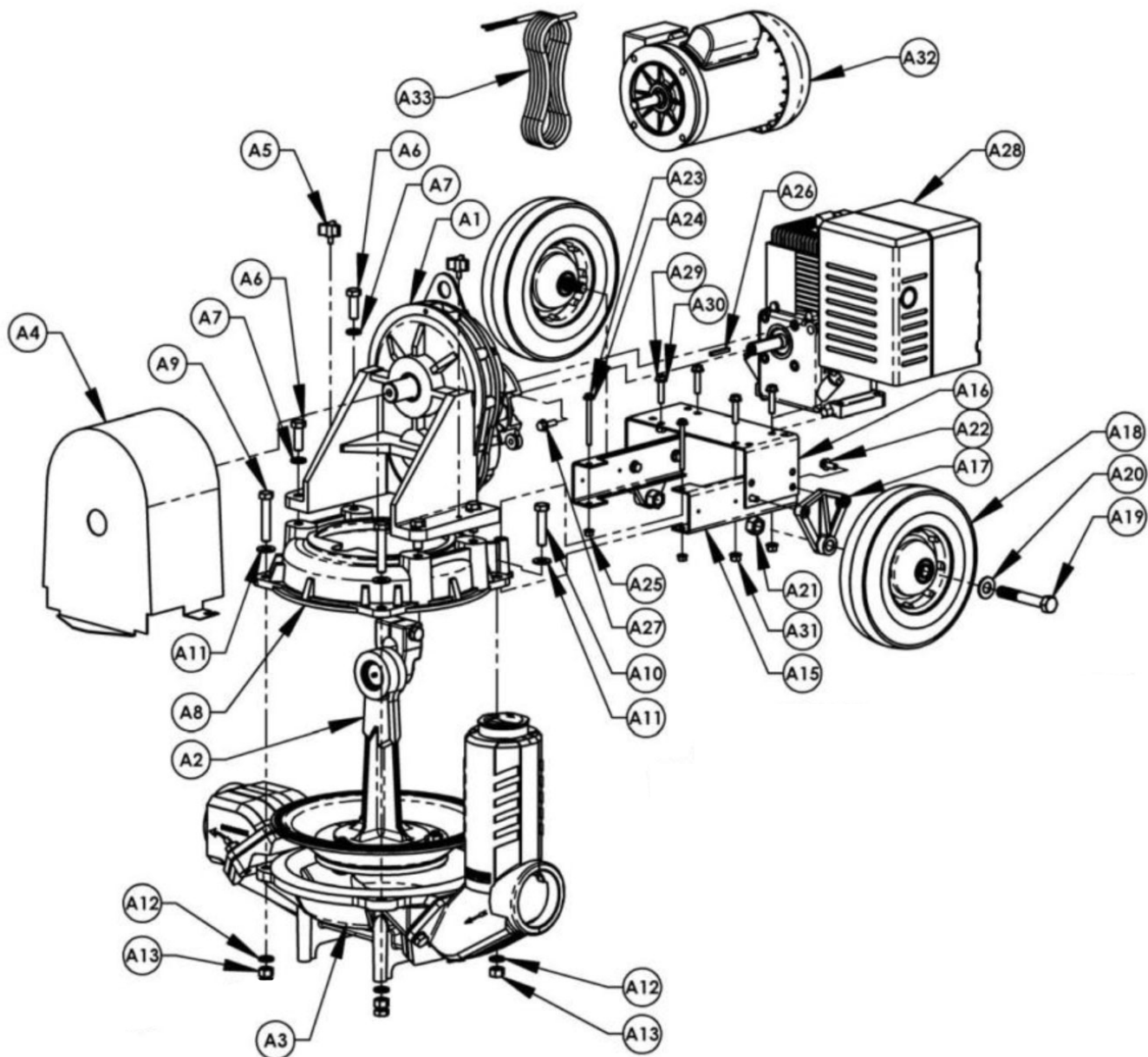
For Repair Parts contact dealer where pump was purchased.

Please provide following information:

-Model Number

-Serial Number (if any)

Part description and number as shown in parts list



Assembled Pump – Figure A

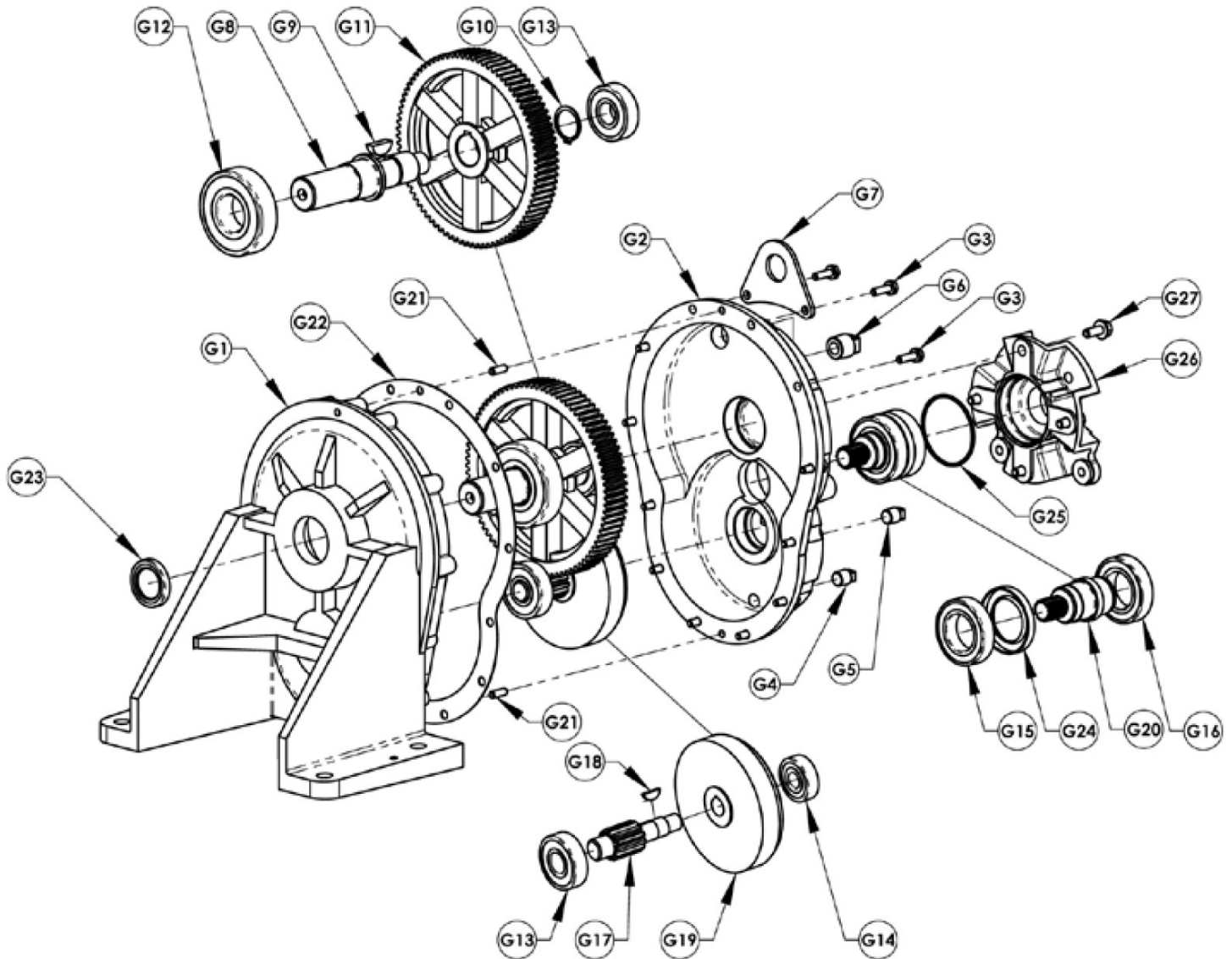
Repair Parts List - Assembled Pump (Reference Figure A)

Ref. No.	Description	3" Engine Driven Pump	
		Part Number	Qty.
A1	Gearbox Assembly	Ref. Page 8	1
A2	Plunger/Diaphragm Assembly	Ref. Page 10	1
A3	Well Assembly	Ref. Page 11	1
A4	Plunger Guard	3354-103-00	1
A5	1/4-20X1/2 Plastic Knob	1716-010-00	2
A6	1/2-13x1-1/2 Hex Head Cap Screw	1766-013-00	2 (3" Version) 4 (2" Version)
A6	1/2-13x2-1/4 Hex Head Cap Screw	1766-016-00	2
A7	1/2 Lock Washer	1798-001-00	4
A8	Base	3354-001-01	1
A9	1/2-13x2-1/4 Hex Head Bolt Grade-5	1766-016-00	2
A10	1/2-13x2-1/4 Hex Head Bolt Grade-5	1766-016-00	2
A11	1/2 Flat Washer	1798-002-00	4
A12	1/2 Lock Washer	1798-001-00	4
A13	1/2-13 Hex Nut	1782-002-00	4
A15	Mount Brace	3354-107-00	2
A16	Engine Mount	3354-108-00	1
A16	Engine Mount Kit for Hatz	335Z-101-90	1
A17	Wheel Bracket	3354-109-00	2
A18	Wheel	1663-000-00	2
A19	5/8-11x4 Hex Head Bolt	1769-000-00	2
A20	5/8 Flat Washer	1799-000-00	2
A21	5/8-11 Hex Nut	1782-020-00	2
A22	5/16-18x3/4 Hex Flange Screw	1745-002-00	4
A23	1/4-20x3 Hex Head Bolt	1734-013-00	2
A24	1/4 Flat Washer	1789-000-00	2
A25	1/4-20 Hex Nut	1776-000-00	2
A26	3/16 Square Key	1517-001-00	1
A27	5/16-24x1 Hex Flange Screw	1753-000-00	4
A27	3/8-16X1-1/4 Hex Head Cap Screw	N/A	4
A28	Engine 3/4 Keyed PTO	See Chart	1
A29	5/16-18x1-1/2 Hex Head Bolt	1748-000-00	4
A29	5/16-18 x 3/4 Hex Bolt (Hatz)	1745-002-00	4
A30	5/16 Flat Washer	1790-000-00	4
A31	5/16-18 Hex Nut	1785-000-00	4
A32	Motor	N/A	1
A33	Cord Assembly	N/A	1
A34	Switch Assembly (not shown)	N/A	1
A35	Handle Kit (not shown)	3354-116-90	1
A36	Nipple Pack (2 NPT nipples)	3270-170-00	1
	*Transport Handle (not shown)	3354-116-90	1

For Repair Parts contact dealer where pump was purchased.

Please provide following information:

- Model Number
- Serial Number (if any)
- Part description and number as shown in parts list



Gearbox – Figure G

Repair Parts List - Gearbox (Reference Figure G)

Ref. No.	Description	3" Pumps Part Number	Qty.
G1	Gearbox Output Half	3354-090-01	1
G2	Gearbox Input Half	3354-091-01	1
G3	¼-20x7/8" Screws and Washer Kit (12 each)	3354-420-90	1
G4	¼ NPT Plug (drain) (kit includes 1)	1767-002-00	1
G5	¼ NPT Plug (oil level) (kit includes 1)	1767-002-00	1
G6	½ NPT Vented Plug (fill) (kit includes 1)	1767-001-00	1
G7	Lift Bracket	3354-106-00	1
G8	Output Shaft	3354-140-00	1
G9	Woodruff Key #1008	2141-000-00	1
G10	External Retaining Ring SH-112	1806-064-00	1
G11	Output Gear	3354-120-00	1
G12	Bearing –Open- 35x80x21 #6307 JEM	3354-190-00	1
G13	Bearing –Open- 20x52x15 #6304 JEM	3354-191-00	2
G14	Bearing –Open- 15x42x13 #6302 JEM	3354-192-00	1
G15	Bearing –Open- 35x62x14 #6007 JEM	3354-194-00	1
G16	Bearing –Sealed- 35x62x14 #6007 2RSJEM	3354-193-00	1
G17	Idler Pinion Shaft	3354-121-00	1
G18	Woodruff Key #406	2157-000-00	1
G19	Internal Spur Gear	2149-000-00	1
G20	Input Pinion (3/4 keyed engine)	3354-122-00	1
G20	Input Pinion (5/8 keyed 56C motor)	3354-123-00	1
G21	1/4x1 Dowel Pin	1717-002-00	1
G22	Gasket	3354-300-00	1
G23	Oil Lip Seal 1.25x1.75x0.25	2148-000-00	1
G24	Oil Lip Seal 40x62x8	2148-001-00	1
G25	O-Ring- Buna #143	2181-005-00	1
G26	Adapter (engine)	3354-093-01	1
G26	Adapter (56C motor)	3354-092-01	1
G27	5/16-18x3/4 Hex Flange Screw	1745-002-00	4
G28	Assembled Gearbox for Gas Engine Models (includes Ref. Nos. G1 thru G24)	3354-402-90	1
G28	Assembled Gearbox for Electric Models (includes Ref. Nos. G1 thru G24)	3354-403-90	1

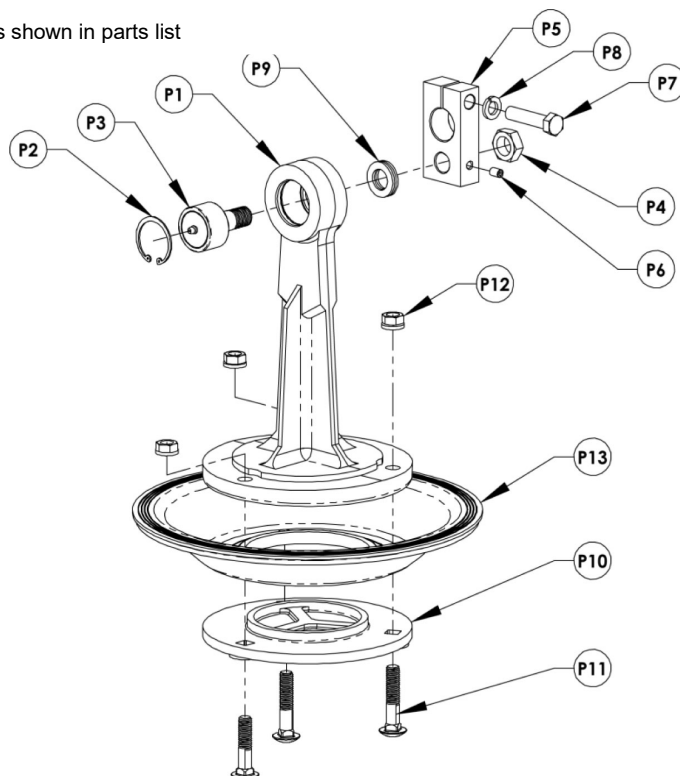
For Repair Parts contact dealer where pump was purchased.

Please provide following information:

-Model Number

-Serial Number (if any)

Part description and number as shown in parts list



Plunger Assembly – Figure P

Repair Parts List - Plunger Assembly (Reference Figure P)

Ref. No.	Description	3" Pumps Part Number	Qty.
P1	Plunger	2134-000-01	1
P2	Retaining Ring	3350-190-00	1
P3	Plunger Bearing	2138-000-90	1
(includes Ref. No. P4)			
P4	Bearing Lock Nut	Incl. w/P3	1
P5	Crank Assembly Kit	2140-000-90	1
(includes Ref. Nos. P6, P7, P8, P9)			
P6	5/16-18x1/2 Socket Set Screw	Incl. w/P5	1
P7	1/2-13 Hex Head Cap Screw Grade-5	Incl. w/P5	1
P8	1/2 Lock Washer	Incl. w/P5	1
P9	Bearing Shim	Incl. w/P5	2
P10	Diaphragm Retaining Plate	2133-000-00	1
P11	Carriage Bolt Kit	3350-011-90	1
P12	1/2-13 Hex Nut	1782-001-00	3
P12	3/8-16 Hex Nut	N/A	-
P13	Diaphragm (Santoprene)	2132-000-00	1

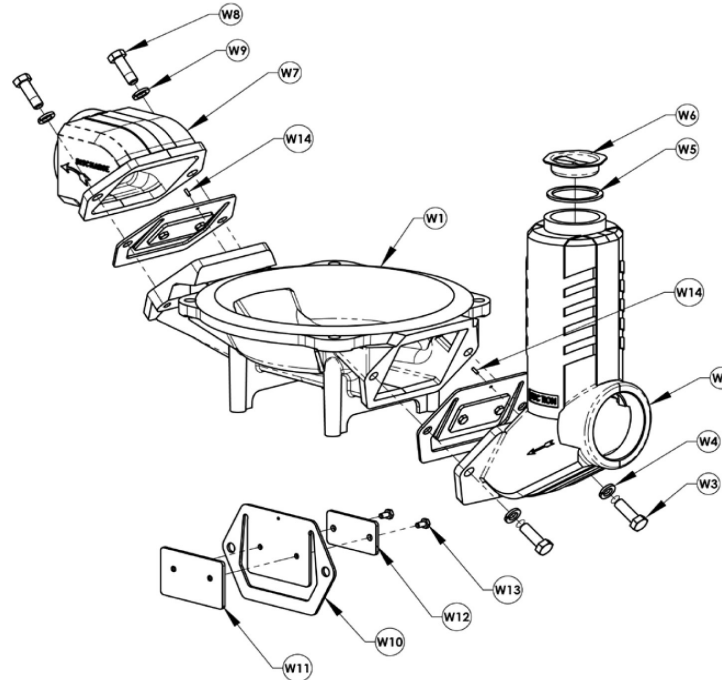
For Repair Parts contact dealer where pump was purchased.

Please provide following information:

-Model Number

-Serial Number (if any)

Part description and number as shown in parts list



Well Assembly – Figure W

Repair Parts List - Well Assembly (Reference Figure W)

Ref. No.	Description	3" Pumps Part Number	Qty.
W1	Well	2120-001-00	1
W2	Suction Plate	2123-000-01	1
W3	1/2-13x1-1/2 Hex Head Cap Screw Grade-5	1766-013-00	2
W3	3/8-16x1-1/2 Hex Head Cap Screw Grade-5	N/A	-
W4	1/2 Lock Washer	1798-001-00	2
W4	3/8 Lock Washer	N/A	-
W5	Gasket	Incl. w/W6	1
W6	Cap	2124-000-00	1
	(includes Ref. Nos. W5, W6)		
W7	Discharge Plate	2131-000-01	1
W8	1/2-13x1-1/2 Hex Head Cap Screw Grade-5	1766-013-00	2
W8	3/8-16x1-1/2 Hex Head Cap Screw Grade-5	N/A	-
W9	1/2 Lock Washer	1798-001-00	2
W9	3/8 Lock Washer	N/A	-
W10	Check Valve (neoprene)	Incl. w/W15	2
W11	Check Valve Weight Top	Incl. w/W15	2
W12	Check Valve Weight Bottom	Incl. w/W15	2
W13	1/4-20x1/2 Hex Head Cap Screw	Incl. w/W15	4
W14	1/8 diameter x 3/8 Pin	2121-000-00	2
W15	Flapper Valve Assembly Kit	3354-071-90	2
	(includes Ref. Nos. W10, W11, W12, W13)		
W16	Suction Strainer (not shown)	1680-000-00	1
	Suction Strainer w/ Hose Shank Kit for British Threads	C311-999-90	1
W17	NPT x BSPT Pipe Nipple Kit	C370-999-90	1



Brave Product Registration Form

YOUR INFORMATION

Full Name:

Last

First

M.I.

Address:

Street Address

Apartment/Unit #

City

State

ZIP Code

Home Phone:

Alternate
Phone:

Email

PURCHASED FROM

Company:

Address:

Street Address

Apartment/Unit #

City

State

ZIP Code

MODEL INFORMATION

Purchase Date

Application Type

☐ Homeowner

☐ Commercial

☐ Rental

Model (i.e. BRPT704H)

Serial # (i.e. 123456)

Signature

Register your product online at www.braveproducts.com

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Dear Valued Customer:

The Brave product you just purchased is built with the finest material and craftsmanship. Use this product properly and enjoy the benefits from its high performance. By purchasing a Brave product, you show a desire for quality and durability. Like all mechanical equipment this unit requires a due amount of care. Treat this unit like the high quality piece of machinery it is. Neglect and improper handling may impair its performance.

Thoroughly read the instructions and understand the operation before using your product. Always contact Brave Product Support at 1-800-350-8739 prior to having any service or warranty work performed, as some services performed by parties other than Brave approved service centers may void this warranty. This limited warranty is in lieu of any other warranty expressed or implied, written or oral and Brave assumes no other responsibility or liability outside that expressed within this limited warranty.

Limited Warranty for Brave Pump Models:

BRP160SP2
BRP160SP3
BRP200TP3

BRP500TP2
BRP520TP3
BRP550TP3

BRP650HP2
BRP750DP3

	Consumer Warranty Period	Commercial Warranty Period
Complete Unit		
	2 years from date of purchase by user	1 year from date of purchase by user
Wear Parts		
	In addition to the normal warranty, Brave shall warrant some normal wear items from defects in material or workmanship for a period of 30 days from the date of purchase by user. Normal wear items covered under this warranty are limited to: Mechanical Seals	
Engines		
	The engine warranty is covered under the terms and conditions as outlined by the engine manufactures warranty contained herein and is the sole responsibility of the engine manufacturer. Normal engine maintenance such as spark plugs, oil changes, air filters, adjustments, fuel system cleaning and obstruction due to build up is not covered by this Brave limited warranty.	

“**Consumer use**” means personal residential household use by a consumer. “**Commercial use**” means all other uses, including, but not limited to, use for commercial, income producing or rental purposes or when purchased by a business.

This limited warranty applies to the original purchaser of the equipment (verification of purchase, in the form of a receipt, is the responsibility of the buyer), is non-transferable, and covers parts and labor. Parts will be replaced or repaired at no charge, except when the equipment has failed due to lack of proper maintenance. If a part is no longer available, the part may be replaced with a similar part of equal function. Any misuse, abuse, alteration or improper installation or operations will void warranty. Determining whether a part is to be replaced or repaired is the sole decision of Brave. Brave will not provide for replacement of complete products due to defective parts. Any costs incurred due to replacement or repair of items outside of a Brave approved facility is the responsibility of the buyer and not covered under warranty. Transportation costs to and from service center and/or service calls are the responsibility of the customer.

This limited warranty specifically excludes the following; failure of parts due to damage caused by accident, fire, flood, windstorm, acts of God, applications not approved by Brave in writing, corrosion caused by chemicals, use of replacement parts which do not conform to manufacturer's specifications, damage related to rodent and/or insect infestation and damage caused by vandalism. Additional exclusions: loss of running time, inconvenience, loss of income, or loss of use, including any implied warranty of merchantability of fitness for a specific use. Also, power equipment needs periodic parts and service to perform well, and this limited warranty does not cover instances when normal use has exhausted the life of a component or the engine.

This limited warranty does not cover any personal injury or damage to surrounding property caused by failure of any part, misuse or inability to use the product. Alteration of the product, including safety features, shall void this limited warranty.

Repair or replacement of parts does not extend the warranty period. This limited warranty gives you specific legal rights. You may also have other rights that vary by state.

Please have model number, item number and serial number on hand prior to making a warranty claim or inquiry.

For products purchased on or after January 1, 2020

BRAVE

A GNE BRAND

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