Our associates will ensure the tool works properly before you leave the store. If you experience issues with the tool while completing your project, simply bring it back to the Tool Rental Center to get a replacement. If you purchase Damage Protection at the time of your rental, you are not responsible for repair costs for tools that break due to normal use.

Video for demonstrative purpose only

BRAVE

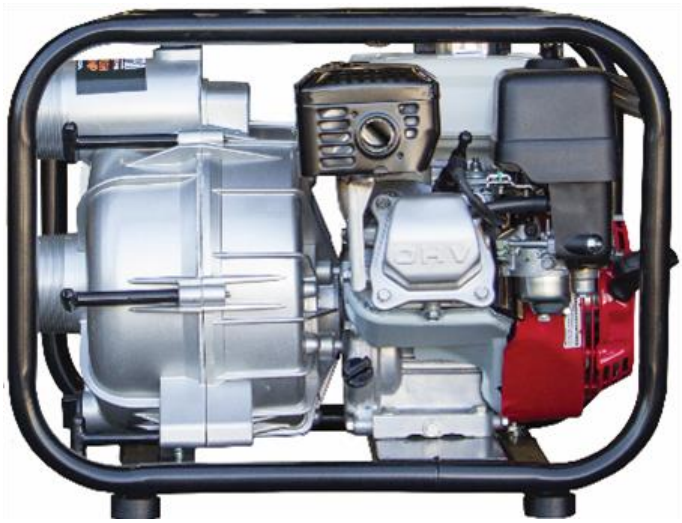
BRP200TP3
Gas Engine-Driven, Self-Priming, SAE Mount, Trash Pump

MBRP200TP3
Rev. A

Operation Manual (GPM 272)

Description

Brave Self-Priming Trash Pumps handle big, high- capacity, liquid transfer jobs with ease. Use them for transferring water, liquid fertilizers, and other chemicals compatible with pump materials. Make short work of other farm jobs: filling nurse tanks, watering seedbeds, and transferring liquids. This self-priming model makes it ideal for de-watering applications.



General Safety Information

California Proposition 65 Warning -- This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING: Do not pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. The pump should be used only with liquids that are compatible with the pump component materials. Failure to follow this warning can result in personal injury and/or property damage and will void the product warranty.

1. DO NOT EXCEED recommended speed, pressure and temperature (140˚ F) for pump and equipment being used.
2. BEFORE SERVICING, drain all liquids from the system and flush. Remove the spark plug wire from the spark plug before servicing the pump or engine.
3. Secure the discharge lines before starting the pump. An unsecured line may whip, causing personal injury and/or property damage.
4. Check hose for weak or worn condition before each use. Make certain that all connections are tight and secure.
5. Periodically inspect the pump and the system components. Perform routine maintenance as required (see Maintenance section).
6. Protect pump from freezing conditions by draining liquid and pumping a permanent-type automobile antifreeze containing a rust inhibitor through the system, coating the pump interior. A 50% mixture with water is recommended.
7. Do not operate a gasoline engine in an enclosed area. Be sure, the area is well ventilated.
   WARNING: Gasoline is a highly combustible fuel. The improper use, handling, or storage of gasoline can be dangerous. Never touch or fill a hot engine.
8. Use only pipe, hose and fittings rated for the maximum psi rating of the pump.
9. Do not use these pumps for pumping water or other liquids for human or animal consumption.

Hazardous Substance Alert

Please Note: It is illegal to ship or transport any hazardous chemicals without United States Environmental Protection Agency Licensing.

1. Always drain and flush pumps before servicing or disassembling for any reason.
2. Before returning unit for repair, drain out all liquids and flush unit with neutralizing liquid. Then, drain the pump. Attach a tag or include a written notice certifying that this has been done.
3. Never store pumps containing hazardous chemical

Plumbing Installation

Before Mounting

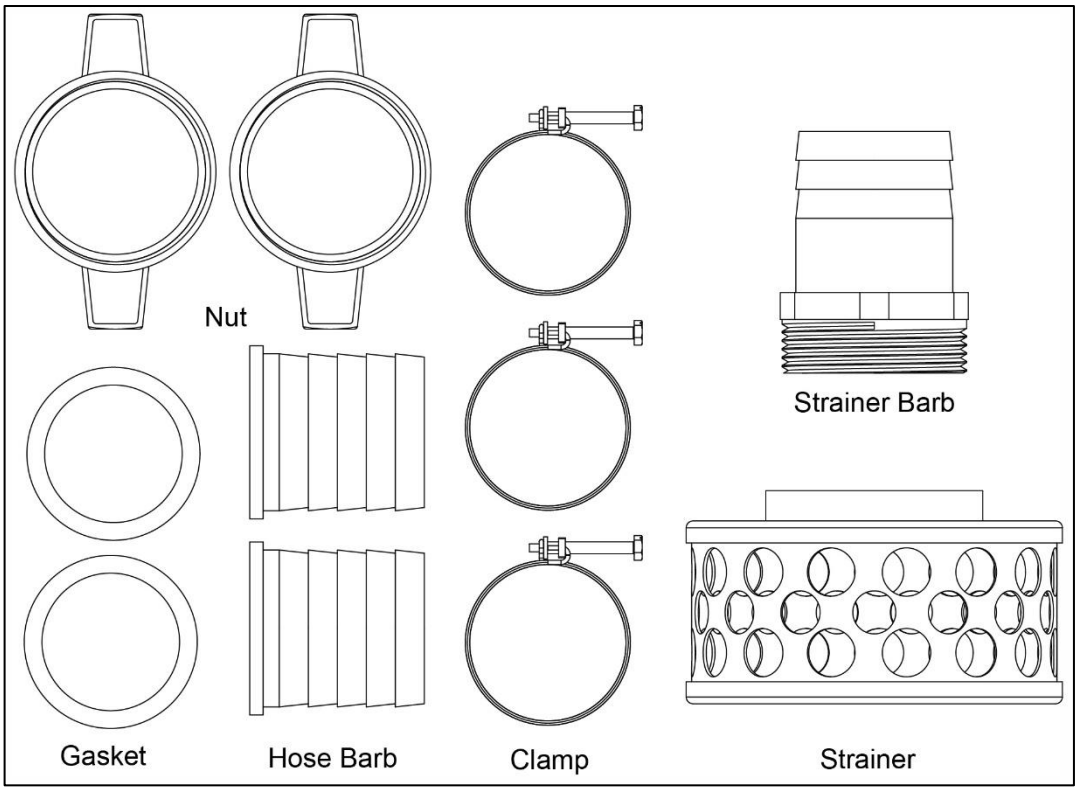
Before setting up the pump for operation, check to see that the motor and pump turn freely by hand. If it cannot be turned over by pulling on the recoil starter, open casing to check for obstructions lodged in pump.

Selecting the Suction Line

To get full capacity of the pump, the suction line should be the same size as the pump suction port. If suction hose is longer than approximately 6 feet, use next size larger hose. The suction line must be free of air leaks. All joints and connections of the suction line must be tightened securely so that no additional air may enter the suction side through a loose connection. Use a good grade of suction hose that will not collapse.

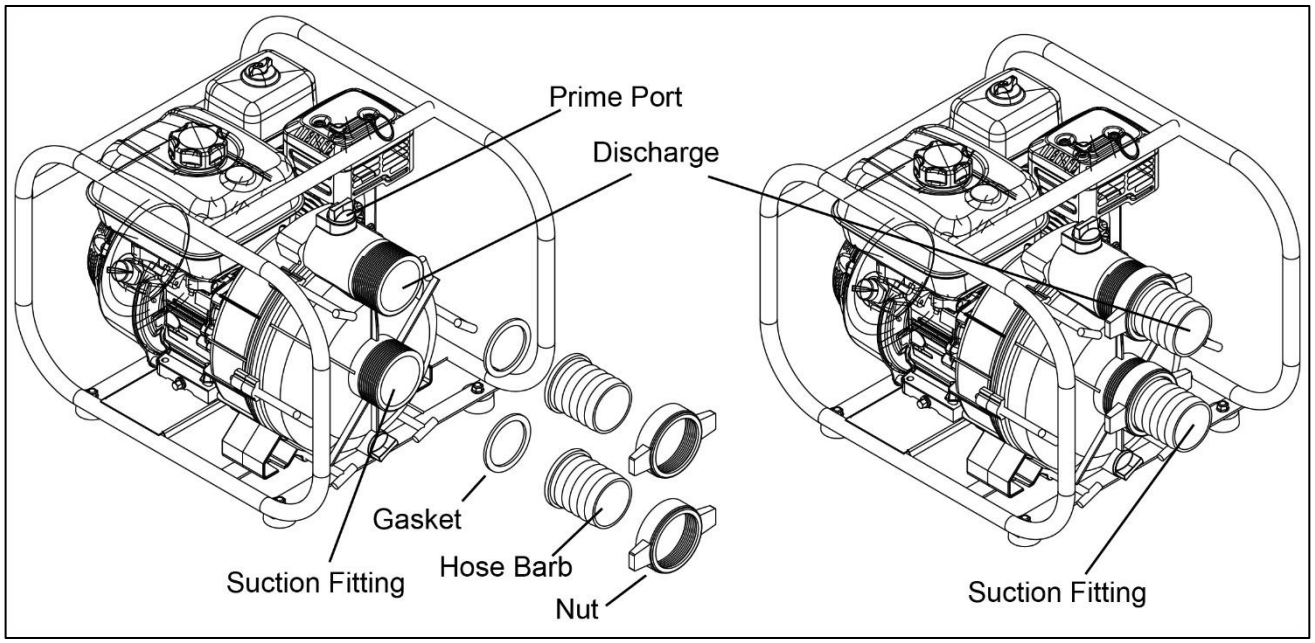
Basket Strainer

The basket strainer supplied with this pump is to be used when transferring solutions that may contain debris and solids which could become lodged in the pump or damage the impeller. Because of the high flow capacity of this pump, unknown debris could be siphoned off the bottom of the tank. Install the strainer on the suction side of the pump whenever possible to avoid pump damage.



Parts included with Pump

Assembly



Operation and Maintenance

Preparations before Starting the Engine

1. Place pump on a flat, outdoor location with a level surface.

2. Fuel: Check fuel level in tank. Do not over fill tank. Use fresh, clean automotive fuel. **Note: DO NOT FILL FUEL TANK WHEN ENGINE IS RUNNING.**

2. Engine Oil: Before checking or refilling with engine oil, make sure the engine is stopped and placed on a stable, level surface.
   Use oil recommended for ambient air temperatures that the engine will be running at. See chart below. Change oil according to manufacturer's recommendation. (Once after the first
   20 hours and every 100 hours thereafter.)

Air Temperature	Single-grade Oil
85° F	#40W
60° F	#30W
32° F	#20W

4. Priming Water: **IMPORTANT: PUMP MUST NOT BE RUN DRY.** On self-priming pumps, only the chamber needs to be filled with liquid. The pump must not run unless the priming chamber is completely filled with liquid because there is a danger of damaging the mechanical seal, which depends on the liquid for its lubrication.

   Self-priming models can be primed by removing the filler cap, located at the top of the pump where the discharge line is mounted to the pump, and filling the priming chamber with liquid. The priming chamber will fill to the level of the inlet port. After use, the priming chamber should be flushed and drained to avoid chemical corrosion and damage from freezing. Drain by removing the lower drain plug located at the bottom of the casing.

Starting the Pump

IMPORTANT: Before starting engine, be sure the priming chamber is filled with liquid and the discharge hose is secure.

1. Turn engine switch located by recoil starter to ON position.
2. Turn the fuel cock to ON.
3. Push the throttle lever to a slightly open position.
4. Operation of choke lever.
   When engine is cold:
   In cold weather, start engine with choke in fully closed position.
   In warm weather, start engine with choke in half-closed position.
   When engine is warm:
   Start engine with choke in fully open position.
5. Start engine by pulling recoil starter out quickly and forcefully. Repeat pulling until the engine starts.

Operation of the Pump

1. Idle the engine for 3 to 5 minutes to warm it up.
2. Open the throttle lever to the upper zone after engine has warmed up.
3. Once the pump has primed, you will note a load on the engine; adjust RPMs to proper speed for your pumping application.

Operation and Maintenance

(Operation and Maintenance Continued)

Stopping the Pump

1. Stop pump for a short time:
   Run engine throttled all the way down (fully to the right). Turn engine switch to OFF position.
2. Stopping pump for storage:
   Turn fuel cock to OFF position instead of turning the engine switch off.
   Let the engine idle for 2 to 3 minutes until fuel in carburetor is depleted and engine stops. If a valve is installed on the discharge hose, you may run pump with valve closed during this procedure.
   Note: Pump must not be run dry. Make sure there is water in the priming chamber.

Storage

1. Drain pump. Flush Pump after Use.

One of the most common causes for faulty pump performance is gumming or corrosion inside the pump. Flush the pump and entire system with a solution that will chemically neutralize the liquid pumped. Mix according to the manufacturer's directions. This will dissolve most residues remaining in the pump, leaving the inside of the pump clean and ready for use.

Do not allow the pump to freeze with liquids in the system.

To Prevent Corrosion:

2. After cleaning the pump as directed above, flush it with permanent-type automotive antifreeze (Prestone, Zerex, etc.) containing a rust inhibitor. Use a 50% solution, half antifreeze and half water. Plug ports to keep out air during storage. For short periods of idleness, noncorrosive liquids may be left in the pump, BUT AIR MUST BE KEPT OUT. Plug the ports or seal port connections.

Do not allow the pump to freeze with liquids in the system.

3. Drain all the fuel from the fuel tank, fuel lines, and filter.

4. Store pump in a clean, dry environment.

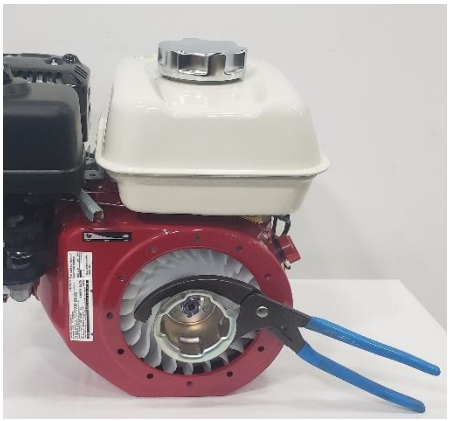
Pump Replacement Instructions

Pump Housing Disassembly

For this pump model, parts are not sold separately. Only a seal kit or complete pump replacement is available, which requires that the old pump be fully removed from the engine and replaced with a new assembly.

1. **Pull spark plug wire off spark plug for safety considerations along with draining fuel from fuel tank and carburetor bowl, disposing properly.**
2. Remove pump housing, volute, impeller, from engine/cradle.

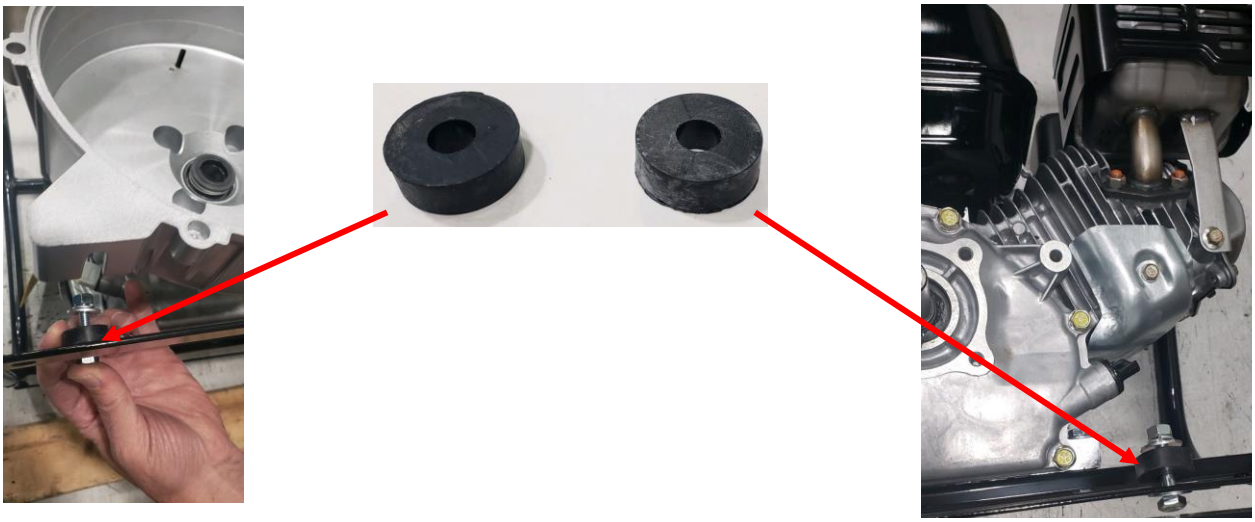
3. Remove impeller by removing the retainer bolt, at end of crankshaft, counterclockwise using a socket wrench or impact and pull off impeller. It may be necessary to hold the crankshaft from turning. To keep it from turning during disassembly, remove the three bolts holding the recoil starter, using a 10mm socket wrench. Then, using a pipe wrench or a clamping tool, hold the starter hub and remove the impeller retaining bolt.
   Be careful not to damage the starter hub while gripping it with the wrench clamping tool.



4. Remove entire pump from engine and clean engine pump mount from all debris.

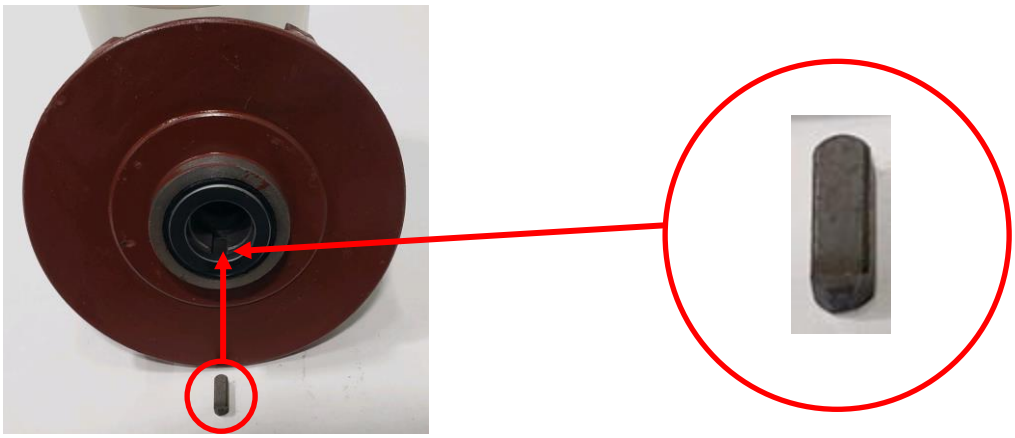
Pump Replacement

1. Begin by tipping engine toward recoil end to better and more easily access the cover/pump mount.
2. Insert pump housing mount bolts with flat washer, lock washer, and nut and insulator bushing into the frame mount holes. The insulator will go between pump housing and frame with the washers and nut on the pump mount foot. Do not tighten at this time.

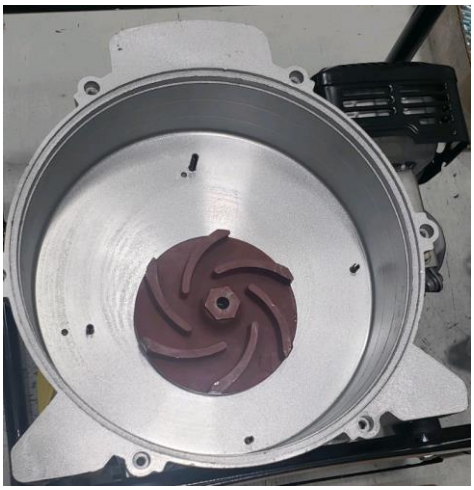


3. Mount the pump housing to the engine using 4 bolts with blue thread lock on each.

4. Insert the key into the impellor.



5. Slide impellor onto the crankshaft aligning the keyway of the shaft. Place a small amount of thread locker on bolt, thread in and tighten securely.



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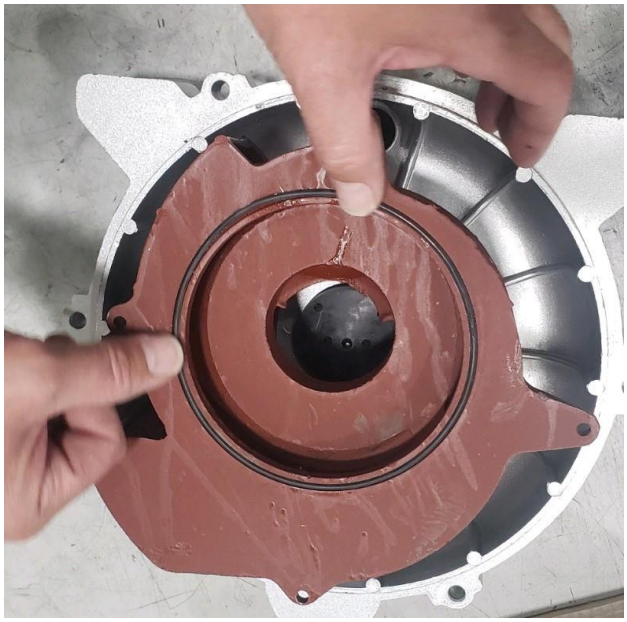
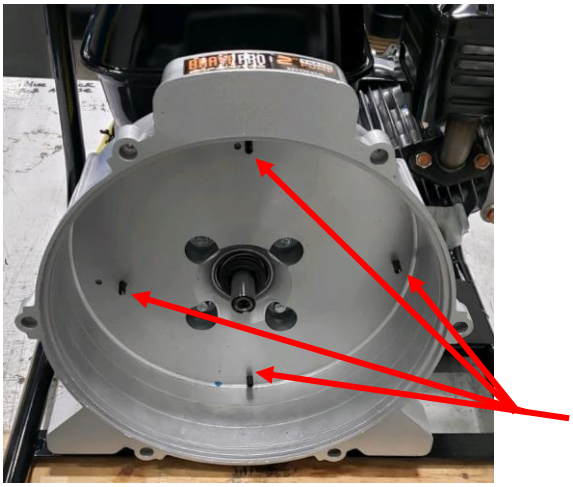
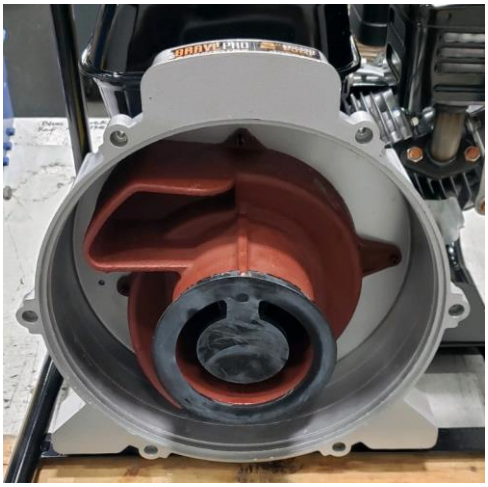
6. Carefully place the mid-sized “O” ring in the groove on the back side of the volute.

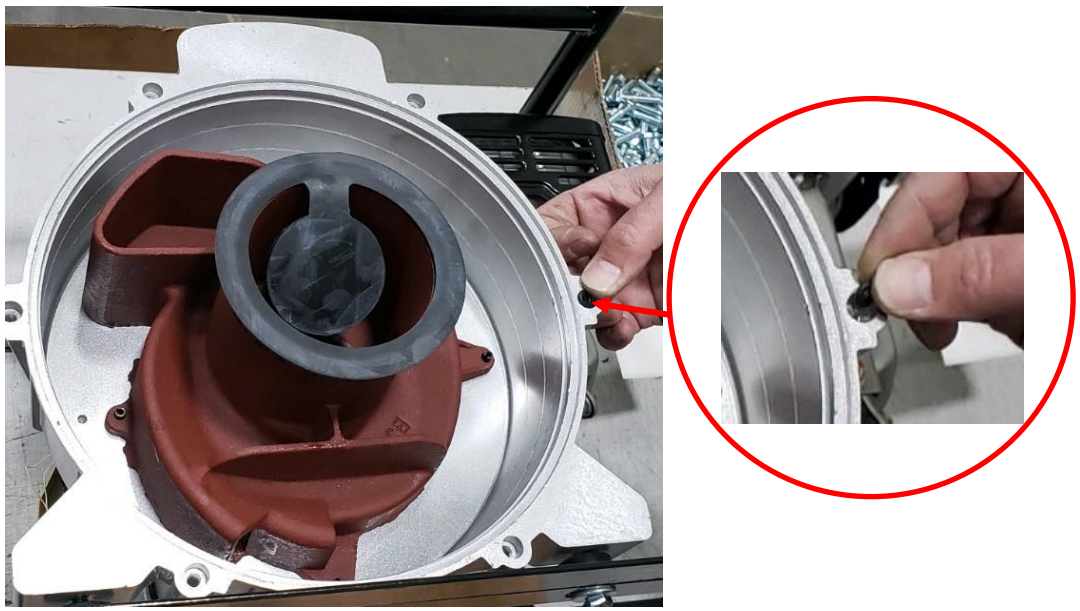


7. install the volute onto the pump housing over the four pins as shown below.





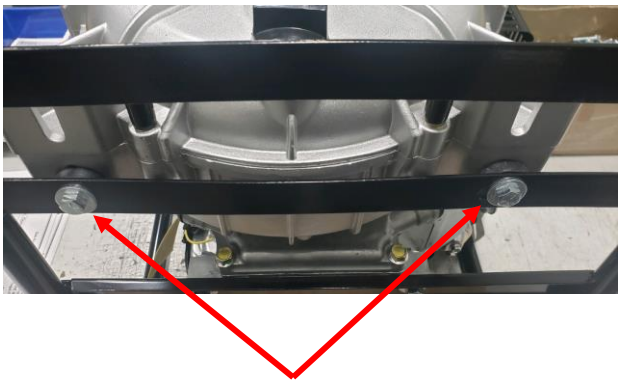
8. Insert the six small “O” rings into the pump housing mount hole bosses, one in each hole. Make certain that they are seated in the bottom of the hole.



9. Place pump cover on, use the six “T” bolts to secure. Tighten progressively in a crossing pattern, DO NOT OVER TIGHTEN. Once they’re all tighten, confirm the edge gap is even all around.

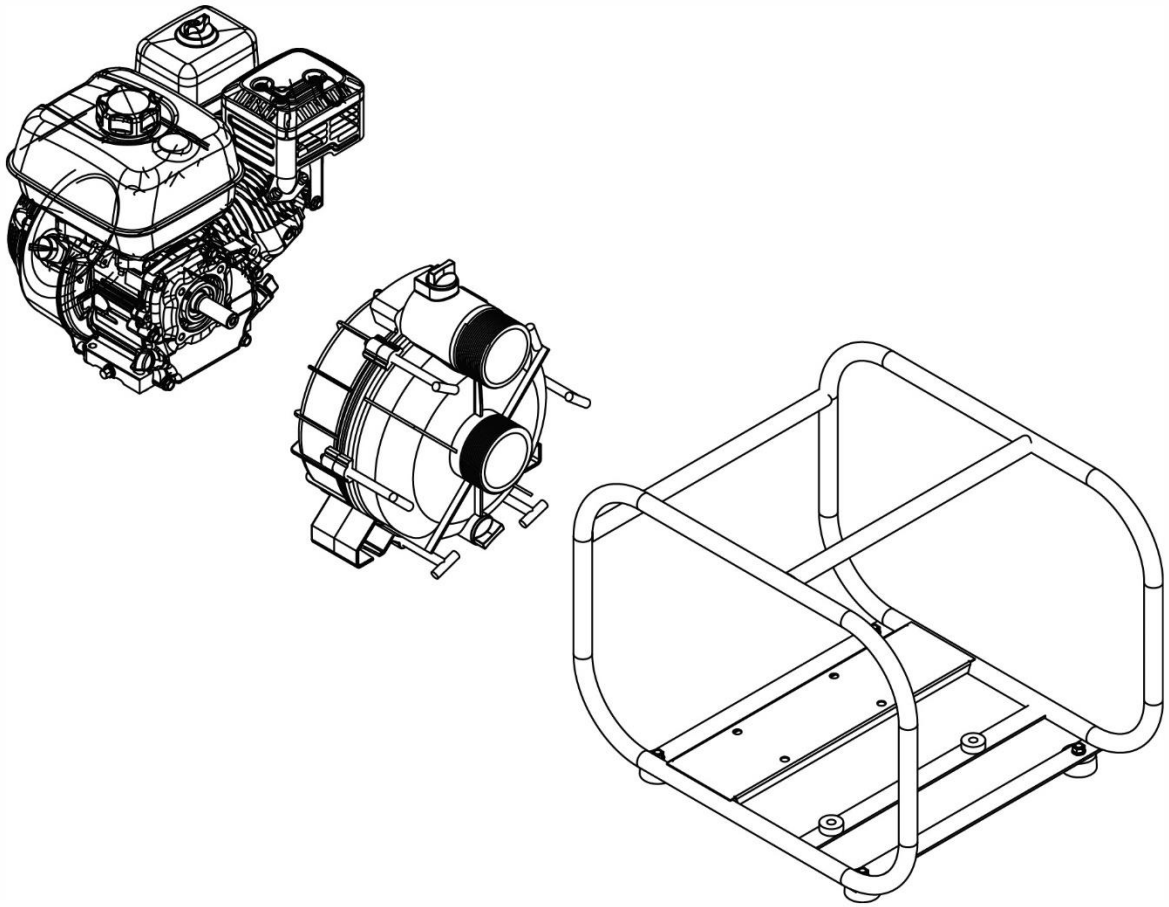


10. Tighten bottom Pump mount bolts installed earlier.



Tighten and secure both Pump mounting bolts.

Parts Breakdown



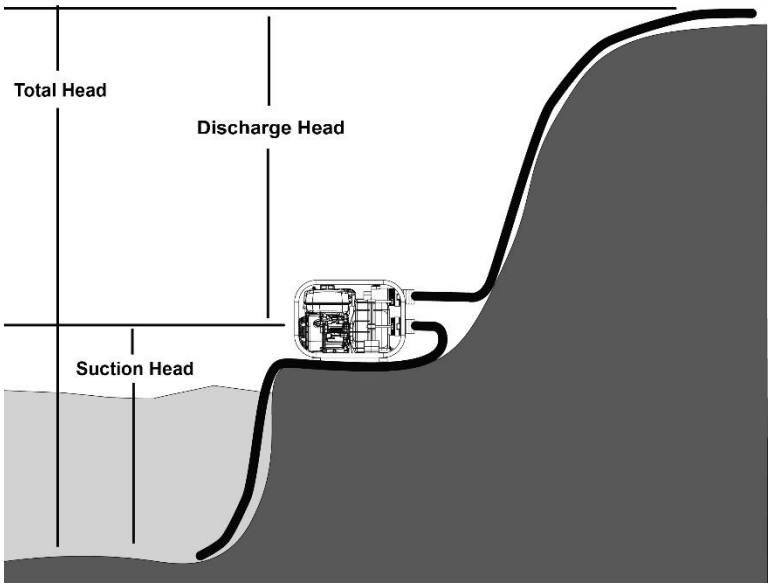
Key #	Part Number	Description
1	GX200	Honda GX200 Engine
2	780971.BRA	3-inch Trash Pump
3	BR2801-0012	Pump Frame
	3430-0801.HYP	Seal Kit

Troubleshooting

Symptom	Probable Cause(s)	Corrective Action(s)
No discharge	Pump not priming	Discharge line must be open for priming to occur. If valve is installed, check that it is open.
		Fill priming chamber with water.
		Increase engine speed.
Low discharge	Air leaks in suction line	Check inlet fittings for leaks. Seal leaks.
	Undersized or collapsed suction hose	Suction inlet hose should be same diameter as inlet port fitting. Check hose for kinks.
	Blocked or clogged inlet	Inspect basket strainer and clear any debris from screen.
	Impeller plugged	Inspect and clear obstruction.
Fluid leaking from pump	Mechanical seal failure	Determine fluid is coming from weep holes between pump and engine. Change out seal.
	Crack in pump housing	Check casing and casing cover for damage.
Engine doesn't run	Check oil & gas	Refer to engine manual for troubleshooting problem.

Performance Data

Performance data is based on testing with water. Performance will vary with fluid density and/or viscosity.



BRP200TP3	
Engine	196cc Honda GX200
Type	Trash
Maximum GPM	272
Maximum PSI	50
Port Size	3" x 3" NPT
Weight	83 lbs
Solid Handling Size	1-1/8" diameter
Mechanical Seal Material	EPDM mechanical seal
Suction Head	23 Ft
Total Head Lift	80 FT

Limited Warranty on Brave Agricultural Pumps & Accessories

Brave agricultural products are warranted to be free of defects in material and workmanship under normal use for the time periods listed below, with proof of purchase.

- Pumps: one (1) year from the date of manufacture, or one (1) year of use. This limited warranty will not exceed two (2) years, in any event.
- Accessories: ninety (90) days of use.

This limited warranty will not apply to products that were improperly installed, misapplied, damaged, altered, or incompatible with fluids or components not manufactured by Brave. All warranty considerations are governed by Brave's written return policy.

Brave's obligation under this limited warranty policy is limited to the repair or replacement of the product. All returns will be tested per Brave's factory criteria. Products found not defective (under the terms of this limited warranty) are subject to charges paid by the return- ee for the testing and packaging of "tested good" non-warranty returns.

No credit or labor allowances will be given for products returned as defective. Warranty replacement will be shipped on a freight allowed basis. Brave reserves the right to choose the method of transportation.

This limited warranty is in lieu of all other warranties, expressed or implied, and no other person is authorized to give any other warranty or assume obligation or liability on Brave's behalf. Brave shall not be liable for any labor, damage, or other expense, nor shall Brave be liable for any indirect, incidental, or consequential damages of any kind incurred by the reason of the use or sale of any defective product. This limited warranty covers agricultural products distributed within the United States of America. Other world market areas should consult with the actual distributor for any deviation from this document.

Return Procedures

All products must be flushed of any chemical [ref. OSHA section 1910.1200 (d) (e) (f) (g) (h)] and hazardous chemicals must be labeled/ tagged before being shipped* to Brave for service or warranty consideration. Brave reserves the right to request a Material Safety Data Sheet from the returnee for any pump/product it deems necessary. Brave reserves the right to "disposition as scrap" products returned which contain unknown fluids. Brave reserves the right to charge the returnee for any and all costs incurred for chemical testing, and proper disposal of components containing unknown fluids. Brave requests this in order to protect the environment and personnel from the hazards of handling unknown fluids.

Be prepared to give Brave full details of the problem, including the model number, date of purchase, and from whom you purchased your product. Brave may request additional information and may require a sketch to illustrate the problem.

Contact Brave Service Department at 800-350-8739 to receive a Return Merchandise Authorization number (RMA#). Returns are to be shipped with the RMA number clearly marked on the outside of the package. Brave shall not be liable for freight damage incurred during shipping. Please package all returns carefully. All products returned for warranty work should be sent **shipping charges prepaid** to:

BRAVE
Include RMA #
20195 S. Diamond Lake Rd., STE 100
Rogers, MN 55374

For technical or application assistance, call the **Brave Technical/Application number: 866-297-4918**, or send an email to: **warranty@braveproducts.com**. To obtain service or warranty assistance, call the **Brave Service and Warranty number**: **866-297-4918**.

*Carriers, including U.S.P.S., airlines, UPS, ground freight, etc., require specific identification of any hazardous material being shipped. Failure to do so may result in a substantial fine and/or prison term. Check with your shipping company for specific instructions.

Visit www.Braveproducts.com today to register your product and stay up-to-date on new products and promotional offers.

The following information is required:

Model # _____ **Serial #** _____

Brave(05/22)
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