

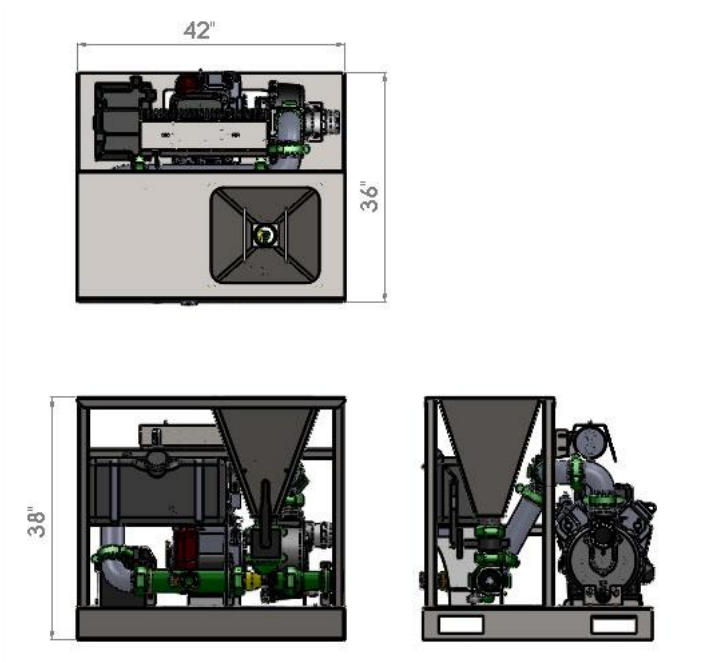
RNM-3G Mixer



PRODUCT DETAILS

The RNM-3G mixer powered by 18* hp air-cooled gasoline engine.

3" centrifugal pump together with high speed jet will get bentonite ready to drill in minutes.



Specifications

Model	RNM-3G
Engine	Briggs & Stratton 18HP air-cooled gasoline engine
* - optional	Briggs & Stratton 16HP
Pump	3" Cast iron centrifugal pump
Fuel Tank	8-gallon (30.3 L) fuel tank, heavy wall (meet CARB TP901 and EPA 40CFR1060)
Connections:	
Standard	3" male camlock on pump suction side 3" male camlock on discharge outlet 2 x 2" male camlock for supply hoses
Optional	1 x 2" male camlock for supply hose 1 x 3" male Victaulic connector for supply hose
Dimensions	36" W x 42" L x 38"H

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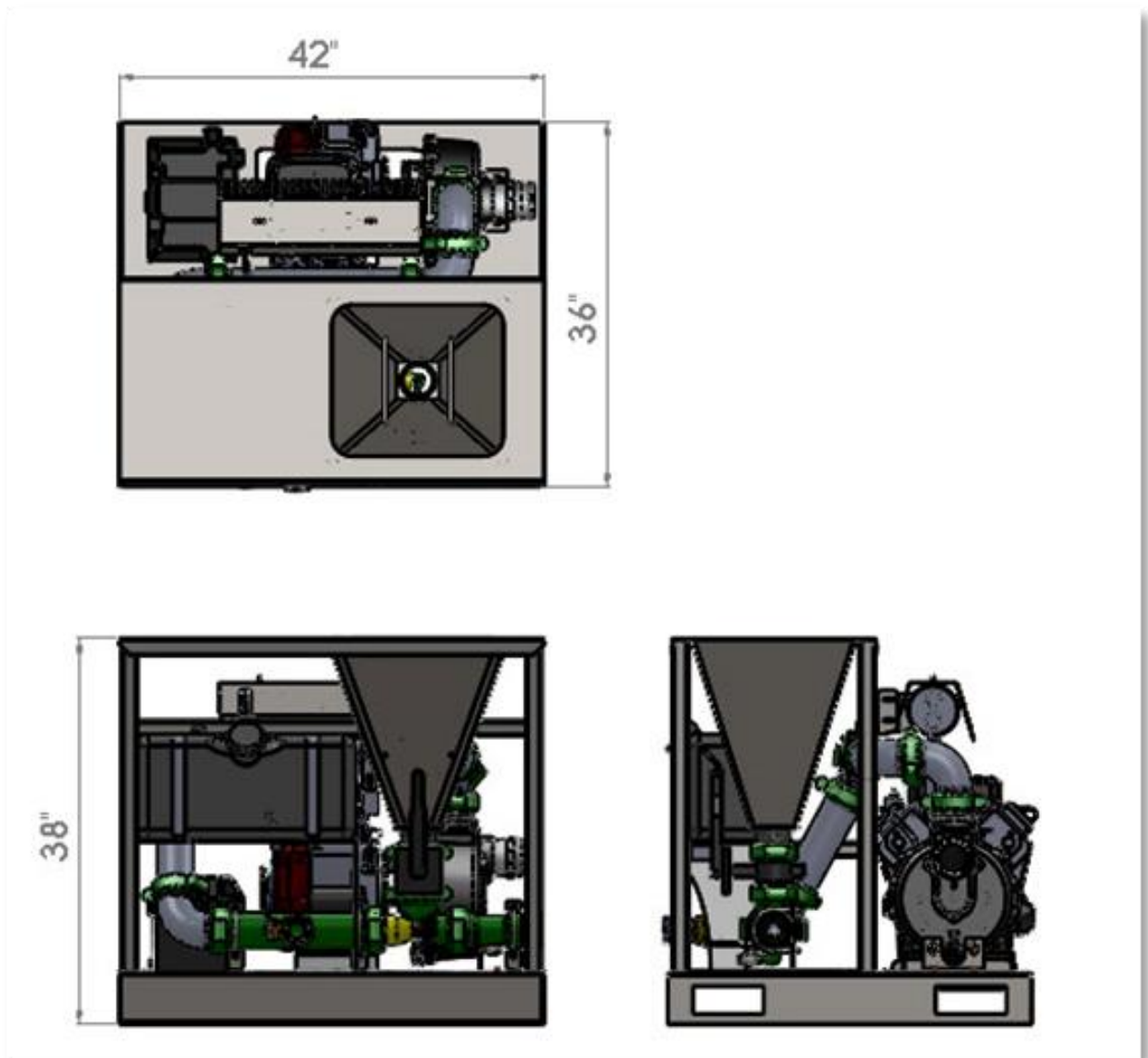
Operators Manual

The mixing unit designed to mix drilling products with water. The slurry circulated until it reaches the desired consistency.

Final product can be transferred to a holding reservoir or to the drilling equipment directly.

The mixing unit consists of a 3" gasoline powered self-priming centrifugal pump, gasoline engine, venturi mixing sub assembly and hopper with a table.

Mixing unit designed as skid based and could be solid mounted.



Components Description and Maintenance

We recommend the following checks prior to operating mixing system:

- Check the engine oil level.
- Inspect the seal reservoir fluid level using the sight window – it should be above the middle of the window
- If dirty, replace the fluid by draining and replacing with a 50/50 mixture of ethylene glycol antifreeze and water. The recommended service interval for this fluid is 100 hours.
- If the fluid in the seal reservoir becomes cloudy or loses fluid after use, the impeller side seal is leaking and should be replaced.
- Inspect the pump for any leaks from the housing gaskets or shaft seal.
- Check that supply reservoir has enough water to supply pump and water intake valve are open.
- Check all valves, fittings, hose clamps, etc. for wear and leaks.
- Replace hoses when worn, cracked, or if leaking



WARNING: USE OF THIS PRODUCT FOR ANY PURPOSES OTHER THAN ITS ORIGINAL INTENT and/or MODIFICATION TO THE ORIGINAL PRODUCT IS STRICTLY PROHIBITED. MANUFACTURER RESERVES THE RIGHT TO DENY WARRANTY OR LIABILITY CLAIMS IN ANY/ALL SITUATIONS INVOLVING MISUSE, ABUSE OR MODIFICATION. THE ORIGINAL INTENT OF THIS PRODUCT DOES NOT INCLUDE USE WHERE THE MAXIMUM ALLOWED SPEED, PRESSURE, OR TEMPERATURE IS EXCEEDED. DO NOT USE THIS PRODUCT WITH ANY FLAMMABLE OR COMBUSTIBLE FLUIDS. DO NOT USE IN EXPLOSIVE ATMOSPHERES. FAILURE TO FOLLOW THIS NOTICE MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY.

OPERATING.

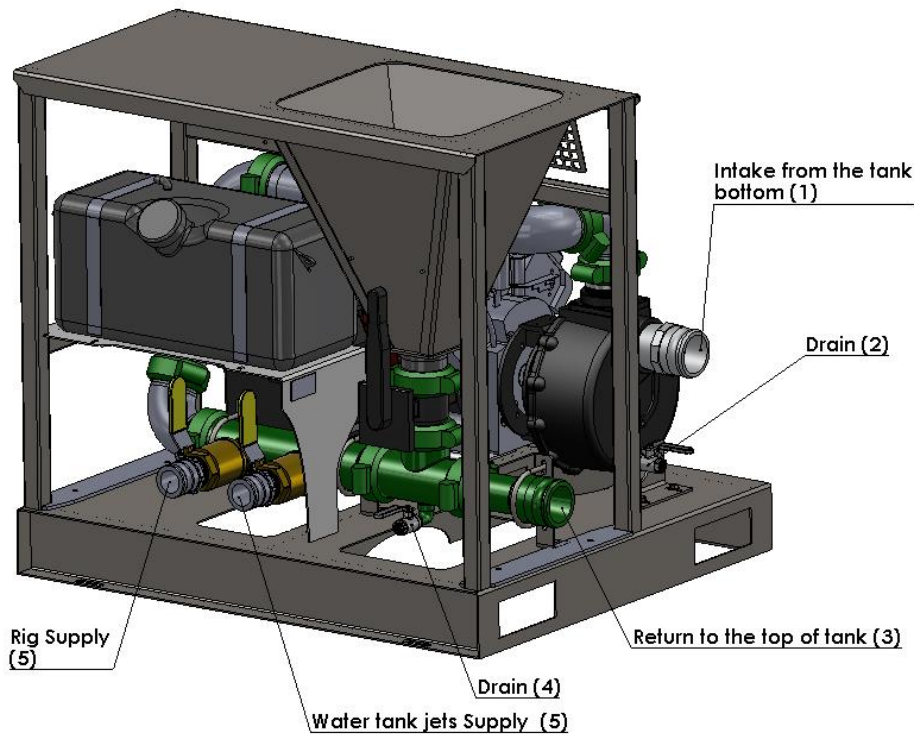
BEFORE STARTING THE ENGINE

Make sure:

- There is enough fuel in gasoline tank.
- The fuel supply valve (located under the gasoline tank) is open.
- There is sufficient fluid in the water supply tank.
- That valve installed on the suction intake line are open.
- The pump is primed.
- The valve (pos. 5) on the discharge manifold connected to the “tank jets” is open.
- The valve (pos.6) on the discharge manifold connected to the rig supply is closed.
- The butterfly valve (pos.7) on mixing tee is closed.

CAUTION

BEFORE STARTING THE ENGINE, BE SURE THE PUMP IS PRIMED



**Pump should never be operated unless there is liquid in the pump casing.
Operation of a dry pump will destroy the seal assembly.**

Mixing Unit Operation.

- Start the engine.
- Increase the engine RPM.
- Open the butterfly valve (pos.7) at the bottom of hopper.
- Discharge the dry or liquid material into the hopper.
- Allow the product to circulate until the desired consistency is attained.

Mixing Unit Shut Down.

- Allow the engine to run at low speed for an approximately 2-3 minutes.
- Stop the engine.



Do not stop engine suddenly while running at high speed.

- Close the fuel supply valve.
- Close valve on suction line.

Make sure:

- The drain valve (pos.4) on mixing tee is open.
- The valves (pos.5 and pos.6) on the discharge manifold are open.

**** IMPORTANT ****

It is highly recommended to pumping clear water through the entire system.
Fill the tank with clear water, start the engine and run until whole system is clean.

STORAGE

**** IMPORTANT****

- KEEP AIR OUT OF THE PUMP AND KEEP FROM FREEZING -

This is the only way to prevent corrosion. Even for short periods of storage, the entrance of air into the pump causes **RAPID** and **SEVERE CORROSION**. Freezing temperatures can cause the fluid or water to freeze internally to the pump, which can cause severe damage to castings.

To prevent excessive corrosion of the pump's components:

- Flush pump thoroughly with 5 to 10 gallons of a clean water.
- Fill with clean water and DO NOT DRAIN.
- For long-term storage (more than 2 weeks), use straight RV-antifreeze (which has a corrosion inhibitor) to fill the pump after flushing.

To protect pump from freezing:

- Flush pump per instructions above and IMMEDIATELY fill pump with straight RV-antifreeze.

Pump parts listing

APPLY RECTOR SEAL COMPOUND #5 TO COUNTERBORE BEFORE INSTALLING SEAL SEAT, TYP. 2

APPLY THIN FILM OF GREASE TO RUBBER PORTION OF SEAL BEFORE ASSEMBLY TO SHAFT

APPLY COPPER BASED ANTI-SEIZE COMPOUND TO THREADS TYP. ALL PLUGS

BOTTOM STUDS ONLY

ITEM QTY	PART NO.	DESCRIPTION
1	43005	MECH. DOUBLE SEAL (OPTIONAL CARBIDE SEAL: 43011)
2	93025	3/8" LOCKWASHER, S.S.
3	95019	1/2" NPT PLUG
4	102035-01	RESERVOIR
5	102036-01	SCROLL PLATE
6	102037-01	IMPELLER
7	110152-01	ANNULAR SEAL
8	1-4135	1/4" x 3/4" ROLL PIN, S.S.
9	S-3555	VIEW WINDOW
10	S-3557	3/8" NUT S.S.
11	S-3561	3/8" x 1-5/8" STUD, S.S.
12	S-3597	3/8" x 2" STUD, S.S.
13	S-3638	GASKET SEAL
14	S-3640	HOUSING COVER
15	S-3641	HOUSING COVER GASKET
16	S-3648	GASKET, SCROLL PLATE
17	S-3649	3/4"-16 LEFT HAND LOCKNUT
18	S-3652	3" F. P. T. SUCTION FLANGE
19	S-3652-FLG	SUCTION FLANGE
20	S-3654	SUCTION FLANGE GASKET
21	S-3655	HOUSING
22	S-3656	FLANGE GASKET
23	S-3657	3" F. P. T. DISCHARGE FLANGE
24	S-3657-FLG	FLANGED ADAPTER
25	S-3664	3/8" x 3-1/2" STUD, S.S.
26	S-3646	IMPELLER SHAFT
27	102189-01	ADAPTER FOR GAS ENGINE
28	S-3666	3/8" x 1-7/8" STUD, S.S.
29	S-3608S	3" S.S. CLAMP ASSEMBLY
26A	114524-01	IMPELLER SHAFT FOR "BS" GAS ENGINE MODEL
27A	102190-01	ADAPTER FOR ELECTRIC MOTOR
27B	114523-01	ADAPTER FOR "BS" GAS ENGINE MODEL
29A	S-3608AS	3" KEYED STAINLESS CLAMP FOR "BS" IMPELLER SHAFT