

OWNER'S MANUAL MODEL TTP-300 3X3 Industrial Trash Pump



P.O.Box 791, Travelers Rest, S.C. 29690 Phone 864-834-7212 Service/Replacement Parts 800-845-4141

WARNING!

Do Not Operate Equipment until reading & understanding Owner's Manual!

The Emission Control System for this pump is warranted for standards set by the Environment Protection Agency.

TTP300 Titan Motor Manual

Revision # 030321A



OWNER'S MANUAL MODEL TTP300 3X3 Industrial Trash Pump

It is extremely important to read and understand the entire contents of this Owner's Manual for the Titan Industrial- Model TTP300 before attempting to operate the Trash Pump. This is a gas engine powered, industrial strength trash pump. The gas engine and the pump are both potentially hazardous and could cause physical injury or even death if improperly used.

TITAN INDUSTRIAL shall not be responsible for any consequences resulting from improper application of this equipment. The operator is required to read and understand the entire contents of this manual before attempting to operate the unit. If the operator does not completely understand the instructions and all of the potential hazards of operating this unit after reading this manual, he must call the factory at 1-800-845-4141 to answer these questions to his complete satisfaction before proceeding.

READ AND COMPLETELY UNDERSTAND entire contents of this Owner's Manual and become familiar with the unit before attempting to start using this equipment! It is your responsibility to know its applications, limitations, and hazards! Call the factory at 1-800-845-4141 with any questions.

FOR OUTDOOR USE ONLY! Never use this unit inside any enclosure including or inside any building. No modifications will eliminate the danger of possible carbon monoxide poisoning, fire, or explosion.

This Manual contains information to ensure your safety and to prevent any equipment problems. Various terms such as 'WARNING', 'CAUTION', 'DANGER', 'IMPORTANT', and the SYMBOL \mathbb{Z} are all used to signify information that is essential for the operator of this equipment to understand and to practice!

SAFETY Z

This pump was designed for specific applications. DO NOT attempt to modify the unit in any way or use it for any application that it was not designed to do. Ask the dealer or contact the factory if you have any questions concerning the pump's application. If factory settings are altered or the application is misapplied, the warranty is void.

Warnings and cautions in this manual and on decals and tags on the unit are not all inclusive. It would be impossible to anticipate every circumstance that might involve a hazard. Handling, operating, or servicing this unit by any procedure not recommended by the manufacturer may render this equipment unsafe

and may pose a threat to you or to others.

- Z Do not operate the pump without water. Permanent damage will occur to the ceramic seals and impellor.
- Z This pump is designed to handle nonvolatile, nonflammable liquids containing specified entrained solids and non-corrosive liquids.
- Z Never attempt to pump volatile, flammable, or corrosive liquids. This could cause damage to the pump and its operator(s).
- Z Make certain that all hose connections and piping are secure and properly supported before operation.
- Do not operate the pump for extended periods of time with the discharge valve closed. It will Z cause pump parts to deteriorate, and may cause explosion due to high internal pressure and heat. It can also cause damage to the pumps ceramic seals
- Do not remove covers, plates, gauges, pipe plugs or fittings from an overheated pump. In-Z ternal pressure could cause the parts to be ejected at high velocities. Allow the pump to completely cool before servicing.

If over heating occurs:

- 1. Stop pump immediately
- 2. Ventilate the area
- 3. Allow the pump to cool completely
- 4. Check the temperature before opening any covers, plates, plugs, or gauges.
- 5. Vent pump slowly and cautiously
- 6. Refer to manual before restarting pump

Do not operate internal combustion engine in an explosive atmosphere. Briggs and Stratton engines are warranted for 90 days.

- Only operate this unit outside with adequate ventilation. This pump's gas engine exhaust produces carbon monoxide gas that can cause unconsciousness and death.
- Operate this equipment at a true horizontial posi-Z tion.

Never store pump with fuel in the tank where gas fuel vapors could be ignited by a flame, spark, or pilot light from an appliance such as a furnace, water

- Z heater, or clothes dryer.
- Never tamper with the governor to gain more power. The maximum continuous pump speed of 3300 RPM is set at the factory and / not be exceeded or altered.
- Never insert any object through the cooling slots of the engine. You will damage the unit or cause injury.
- Never refuel a hot or running engine. Avoid overfilling the fuel tank. Always use the correct type of Z fuel. Leave 1/2" between top of fuel and bottom of tank neck.

This pump was designed for specific applications. DO NOT attempt to modify the unit in any way or use it for any application that it was not designed to do. Ask the dealer or contact the factory if you have any questions concerning the pumps application.

Warnings and cautions in this manual and on decals and tags on the unit are not all inclusive. It would be impossible to anticipate every circumstance that might involve a hazard. Handling, operating, or servicing this unit by any other proce -dure not mentioned will void the warranty.

CAUTION! The engine exhaust contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

SETTING UP TRASH PUMP

WARNING!

Never operate an internal combustion engine in an explosive atmosphere. Do not operate engine in enclosed areas without proper ventalation

CAUTION!

Pumps and related equipment must be installed and operated accoring to all national, local, and industry standards.

WARNING!

Never tamper with governor to gain power. The maximum continuous operating speed of 3300 RPM is set at the factory.

Inspection

- **Z** This pump assembly was inspected and tested before shipment from the factory. Inspect the pump for any damage that may have occurred during shipping. Check as follows:
 - a. Inspect the pump and engine for cracks, dents, damaged threads and other obvious damage.
 - b. Check for loose hardware, tighten if necessary. Gaskets tend to shrink, check for loose hardware at mating surfaces
 - c. Carefully read all tags, decals, on the pump assembly. Follow all directions.
 - d. Damage to equipment created by the carrier must be claimed against the carrier.

Positioning Pump

LIFTING

The pump is designed to be lightweight and portable. Pump is protected by a rollover base that also serves as a two man carry handle. Customer installed equipment, such as the suction hose, must be removed before attempting to lift.

z MOUNTING

Place the pump as close as possible to the liquid being pumped. A level mounting position is required for proper operation.

Z To ensure sufficient fuel and lubrication, DO NOT position the pump at more than a 15 degree angle off the horizon.

Suction and Discharge Piping

- Pump performance is adversely effected by increased suction lift, discharge elevation, and friction losses.
- **Z** Keep discharge line as strait as possible to minimize friction loss. Minimize the use of elbows and fittings which increase friction loss. Do not reduce the discharge hole to induce water pressure.
- **Z** Before tightening a connection flange, align it exactly with the pump port. Never align the hose by tightening the flange bolts.
- Z Lines near the pump must be independently supported to minimize strain on the pump. Pump strain can lead to a decreased pump life.
- **Z** To avoid air pockets when priming, the suction line must be as short and direct as possible, but at least 8 feet long, and not to exceed 12 feet in length.
- **Z** Suction lines must be the same size as the pump inlet.
- **Z** A strainer must be used at all times with no greater than 1" X 5/8" openings.
- Slight leaks will affect priming, especially when operating with a high suction lift. All suction line connections should be sealed with pipe dope. The pipe dope should be compatible with liquid being pumped.

OPERATION OF THE TRASH PUMP

WARNING!

This pump is designed to pump non-volitile, nonflammable liquids containing specified entrained solids. Do not attempt to pump volitile, flammable, or corrosive liquids.

CAUTION!

Never operate pump unless there is liquid in the pump casing. The pump will not prime when dry. Extended operation of dry pump will destroy the seal assembly.

WARNING!

Never tamper with governor to gain power. The maximum continuous operating speed of 3300 RPM is set at the factory.

Priming

- This pump is self priming, but the pump should never be operated unless there is liquid in the pump casing.
- **Z** Add liquid to the pump casing when:
 - 1. The pump is being put into service for the first time.
 - 2. The pump has not been used for a considerable length of time.
 - 3. The liquid in the pump casing has evaporated.
- **Z** To fill the pump, remove the pump fill plug at the top of the pump casing. Add clean liquid until the casing is filled past the flapper on the suction valve of the pump and replace the cover or plug. Insure the flapper seals and water remains in the pump.
- Run the engine at maximum governed speed during the priming cycle. With a suction lift of 5 to 10 feet the pump should prime within 1 minute. The maximum suction lift of 25 feet (at sea level) should require no more than 2 minutes for the initial prime. If the pump does not prime within five minutes, shut off the engine and trouble shoot.
- The suction hose should be a minimum of 8 feet long and have a wire filter screen, to prevent hard solid objects from entering the pump and damaging the impellor and seals.

Starting the Engine

Z Always check oil before starting use. SAE 30 oil.

Operation

Z Priming is indicated by quieter operation. The pump may not prime immediately because the suction line must first fill with liquid. If the pump fails to prime in five minutes check the suction hose for leaks.

Z LEAKING

No leakage should be visible at pump mating surfaces, or at pump connections and fittings. Keep all connections and fittings tight to ensure maximum pump efficiency. Use a lubricant on suction hose threads to assist in sealing suction hose.

z LIQUID TEMPERATURE

The maximum liquid temperature of the pump is 110 degrees F. Overheating can occur if the pump is operated with the suction or discharge valves closed. If overheating occurs allow for the pump to cool before servicing it. Refill the pump case with cool liquid.

Z STRAINER

If a strainer has been shipped or installed by the user, check it regularly and clean it when necessary. Do not run the pump without a strainer.(See previous notes.)

z STOPPING

Never halt the flow of liquid suddenly. Reduce the throttle speed slowly and allow the engine to idle briefly before stopping.

Z COLD WEATHER PRESERVATION

Drain the pump to prevent freezing damage. Clean out any solid by flushing with a hose.

TROUBLESHOOTING

Problem	Cause	Solution
Pump Fails To Prime.	 Not Enough liquid in casing. Suction valve contaminated or damaged. Air leak in suction line. Lining of suction hose collapsed. Leaking or worn seal or pump gasket. Pump speed to slow Strainer clogged Suction lift too high 	 Add liquid to casing. Clean or replace. Correct leak Replace Suction hose. Check pump vacuum, replace seal or gasket. Check engine. Clean strainer. Measure lift with vacuum gauge. Reduce lift or friction losses in suction line
Engine will not start or engine starts but runs rough and lacks power.	 1.On/Off Switch is turned 'OFF'. 2.Dirty air cleaner. 3. Out of fuel. 4. Stale fuel. 5.Not enough speed or force is used for recoil start. 6.Water in fuel. 7.Low oil level. 8.Engine has lost compression. 1.Out of fuel. 2.Low oil level. 	1.Turn On/Off Switch to 'ON'. 2.Clean air filter 3.Fill fuel tank. 4.Drain fuel tank and refill. 5.Read and follow directions. 6.Drain and refill tank. 7. Add oil to proper level. 8.Contact service center. 1.Fill fuel tank. 2.Fill crankcase with oil.
	3. Fault in engine.	3.Contact service center
Engine shuts down during operation.	1.Dirty air filter.	1.Replace the air filter. 2.Contact service center.

Service 1-800-845-4141



Fax 864-834-5127

Replacement Parts 1-800-845-4141

Toll Free 1-800-845-4141 www.titanindustrial.net

SPECIFICATIONS

5.5 H.P. Gas Engine Engine Meets California Emission Codes 12 Feet Lift 25 Feet Flathead 40 to 180 Deg. F. Liquid Handling Range

3 X 3 Inch Semi Trash Pump Semi-Solid Material Handling 3600 R.P. M. 18,000 G. P. H. Easy Recoil Start HD Polyethylene Strainer Fast Priming Portable

> All Metal Construction Removable Volute





3x3 Industrial Trash Pump



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