



FUEL TRANSFER PUMP SYSTEM

6. TIRES MAINTENANCE:

Your pump has been fitted with heavy duty pneumatic tires. These tires increase the life of your pump by reducing vibration and jarring to the frame and components. The tires also allow for easy movement over rough terrain. While pneumatic tires have many advantages, it is important they are maintained properly. The tires require 8 psi of air pressure for proper inflation. Always check your air pressure to achieve optimum performance over rough terrain. Avoid sharp objects and sidewall punctures.

7. TROUBLESHOOTING

The DTP20 is powered by 12 volts DC. The cart is capable of utilizing two 12 volt batteries for extended use. Before the pump is turned on, be sure it is wired correctly. It is very important that if two batteries are used, they are connected together in "parallel" configuration, so when the final voltage reaches the pump, it is at 12 volts. If the batteries are wired in series, you will send 24 volts to the pump and burn the pump up.

PROBLEM	POSSIBLE CAUSE	REPAIR
PUMP NOT TURNING ON.	Battery low or dead, bad battery connections, broken wires or wire. Check wiring behind face plate and connections to the AMP meter and volt meter.	Repair broken or poor connections as required.
PUMP TURNS ON AND RUNS BUT NO PRESSURE.	Sear chip broken. Inlet suction hose is not in transfer fluid. Battery wiring backward.	The sear chip is located under the four bolt end plate on end of pump. The sear chip connects the motor to the rotor and is made of a plastic type material. If there is a jam up of the pump assembly the sear chip will break before damaging the pump. Replace sear chip as necessary. Check inlet suction hose. Check for correct wiring.
AFTER EXTENDED USE PUMP SHUTS DOWN.	After extended use, the pump incorporates a thermal shutdown to protect the motor.	Allow pump to cool and restart the pump.
VOLT METER PEGGED.	Improper battery wiring.	Check and be sure batteries are connected in "Parallel".
SLOW OUTPUT.	Clogged filter. Hoses clogged. Battery voltage low.	Change the filter and element. Check hoses for blockages. Check battery voltage or re-charge battery.

REPLACEMENT PARTS AND WARRANTY SERVICE:

While this product has been built with the highest level of quality, there may be components that wear out over time and require replacement.

FOR A WARRANTY CLAIM, RETURN THE ITEM TO:

Innovative Products of America® Att: Warranty Repair
234 Tinker Street, Woodstock, NY 12498
888-786-7899 www.ipatools.com

SPECIFICATIONS:

DTP20 is a Mobile 12 Volt DC Transfer Pump capable of a flow rate of 20GPM. This flow rate may be affected by the addition of restrictive devices adding resistance to the flow line, i.e., 2X-6 Foot Hose, Flow Meter, Filter and Foot Valve. After the additions of these devices, the other variable is temperature of the oil being transferred. The colder the fluid being transferred, the slower the flow rate and the greater the current draw.

TRANSFER RATE:	20GPM at level ambient load
VOLTAGE:	12 volt DC
AMPERAGE:	25amp draw ambient
BATTERY TYPE:	2 X Group 31 Threaded Post 12 Volt DC
PNEUMATIC TIRES:	10"
HOSE:	2 X 6' long one inch hard wall ground wired hose
FUEL FLOW METER:	4 digit analog resettable flow meter (1" inlet)
FOOT VALVE:	1 1/4" foot valve screened (brass)
AXEL SIZE:	3/4" X 16"
VOLT METER:	12 Volt Range
AMP GAUGE:	30 AMP Deflection
CART:	Steel welded construction
COUNTRY OF ORIGIN:	Made and assembled in USA with some foreign components

WARNING:

- THE VAPORS CREATED FROM GASOLINE TRANSFER ARE HIGHLY FLAMMABLE AND CAN BE VERY DANGEROUS IF USED.
- NEVER LEAVE PUMP RUNNING AND UNATTENDED.
- THE FUEL TRANSFER CART (DTP20) IS NOT RECOMMENDED FOR THE FOLLOWING FLUIDS: Acetone, Ammonia, Benzene, Bleach, Hydrochloric Acid, Ink and Toluene
- THE (DTP20) DC POWERED IS RECOMMENDED FOR TRANSFERENCE OF THE FOLLOWING FLUIDS: Diesel, Kerosene, Heptanes, Mineral Spirits and Hexane
- GASOLINE TRANSFER WARNING: Although the DTP20 DC powered transfer pump can transfer gasoline and no damage will occur to the pump, it is not recommended for the following reasons: Because of the DC application of the fuel transfer cart, there is a potential of battery sparks igniting gasoline that may have spilled or collected on the cart from prior use. It is for these reasons that IPA is NOT recommending the use of the fuel transfer cart DTP20 DC powered for the transferring of gasoline. One gallon of gasoline is equivalent to three sticks of dynamite and the possibility of great harm or bodily injury exists if used. Please also be careful in calm, dry climates.
- NO SMOKING at any time, no exceptions.

SET UP

1. BATTERY INSTALLATION:

TO REMOVE THE BATTERY PROTECTION COVER: Remove the screws and slide the plate out towards the back. Then install two well-charged Group 31, 12 Volt Batteries. One Group 31 Battery well-charged can last over 1.5 hours of use and double the time if two batteries are used. Install Batteries keeping in mind the proper parallel wiring polarity which produces 12 volts. **(DO NOT WIRE BATTERIES IN SERIES. THIS MAKES 24 VOLTS WHICH WILL DAMAGE THE UNIT AND A FIRE COULD RESULT).** After proper installation of batteries, check the volt meter for correct 12 volt indication. Slide the battery protection cover back over the batteries and reinsert the screws. Be careful not to touch the battery terminals with the metal cover; you could create a spark and ignite any nearby fuel or oil.

2. OPERATIONAL TESTING PRIOR TO USE:

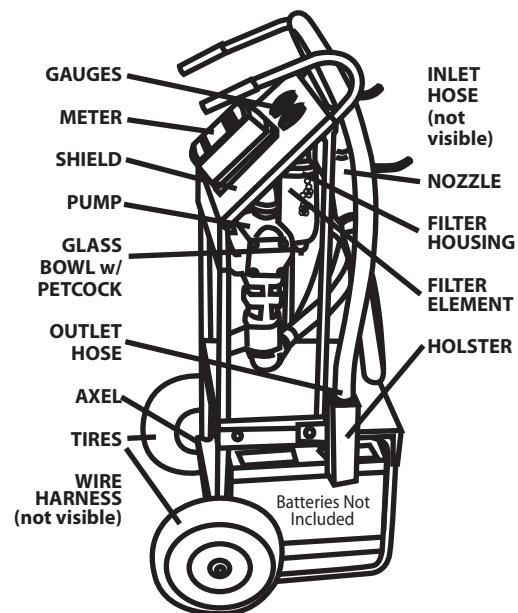
DO NOT TURN THE UNIT ON UNLESS PROPER WIRING IS VERIFIED. Only short durations of dry running the pump for operational verification should be used. Continuous dry running of the pump will damage the pump unit and void warranty. To operate the pump assembly, turn the handle to the on position. Switch is located on the right side of the pump assembly. Once the pump unit is turned on, you should hear the pump running and then verify proper 12 volt connection.

3. FUEL TRANSFER AND OPERATIONAL USE:

After setting the DTP20 up correctly with battery or batteries installed, you are ready to transfer fuel oil. The DTP-20 is fully mobile and capable of traversing most terrains. Roll the DTP-20 out to a tractor that has fuel in its tanks and insert the suction side of the hose assembly into the tank until the screened foot hits the bottom of the tank. **(USE OF THE SCREENED FOOT VALVE ALLOWS SOME FUEL TO BE LEFT IN THE TANK SO IT IS NOT EMPTIED AND CONTAMINANTS AND WATER ARE NOT TRANSFERRED).** Once the suction side is correctly installed in the fuel tank, then zero the fuel flow meter prior to fuel transfer. To begin transfer, turn on the unit via moving chrome foot to the up position, turning on the pump and inserting the pump nozzle into the tank where the diesel oil is being transferred. Pull the trigger on the handle and begin transferring fuel. For the best transfer rate, keep the suction side as close to level as possible and keep your batteries fully charged. **NOTE: WHEN BATTERIES ARE HOOKED UP IN PARALLEL, THEY TAKE APPROXIMATELY TWICE AS LONG TO FULLY CHARGE.**

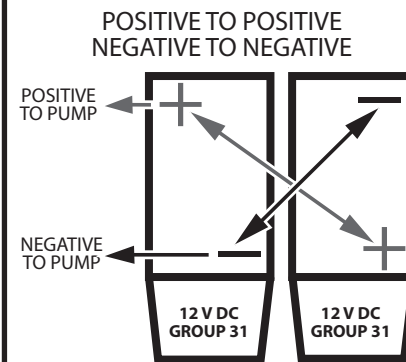
We do not suggest using the override lever, as you run the risk of operating the pump once all the fuel has been transferred, permanently damaging the pump and voiding the warranty. Listen for the fuel or observe the flow from the nozzle to determine when to shut off the pump.

DTP20 PARTS LIST



12 VOLT PARALLEL BATTERY INSTALLATION

WARNING:
**INSTALL BATTERY WITH
POSITIVE TO POSITIVE AND
NEGATIVE TO NEGATIVE
FOR PARALLEL INSTALLATION.
ANY OTHER CONFIGURATION
WILL BOOST POWER TO 24 VOLT
AND DAMAGE THE PUMP.**



BATTERIES NOT INCLUDED

4. METERS:

The Amp Meter displays the amount of current the pump is drawing from the batteries. Several factors affect the amount of current drawn from the batteries, such as length of hose, temperature, fluid viscosity, condition of terminal connections. The pump typically draws between 20-30 amps under normal operating conditions.

The Voltage meter indicates proper battery connections, and current condition of the batteries while at standstill and under load. This pump should not be run when the batteries voltage reads less than 11.5 volts. A fully charged battery should read approximately 12.4 Volts DC before the load is applied.

5. MAINTAINING BATTERIES:

Battery connections should always be kept clean and free of corrosion. Corrosion on the battery terminals causes resistance and leads to premature battery failure. While two group 31 batteries provide enough power to transfer thousands of gallons of fuel, it is important these batteries be fully recharged after each usage. To charge your batteries while they are still connected to the pump, connect your battery charger's positive lead to the positive lead of the first battery and the charger's negative lead to the negative lead of the other battery. Follow standard battery care charge time and procedures.