



# Operator's Manual

## DT1 Equipment

500, 1000, 2000, 3000, 4000  
and 5 000 L models



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## 1. INTRODUCTION

Congratulations on your purchase of the Guardian Tanks DT1 Tank to complement your refueling or transport operations. This equipment has been designed and manufactured to meet the needs of a judicious buyer for efficient equipment refueling, fuel transport or storage.

The safe, efficient and trouble free operation of your DT1 requires that you and anyone else who will be using and/or maintaining the tank, read and understand the safety, operation, maintenance and troubleshooting information contained within the Operator's Manual.

This manual covers the DT1 500L, 1 000L, 2 000L, 3 000L, 4 000L and 5 000L. Use the table of contents as a guide to find the required information.

Keep this manual handy for frequent reference and to pass it on to the new operators or owners. Call your dealer or the manufacturer if you need assistance, information or additional copies of the manuals.

OPERATOR ORIENTATION – This directions left, right, front and rear, as mentioned throughout this manual, are as seen from the open cover and looking toward the unit.



## 2. USER'S NOTICE

- A. The law regarding the transportation of dangerous goods (LTDG) currently in force applies to the Guardian Tanks products sold by Atelier Gérard Beaulieu Inc.
- B. The tank can be used for the transportation of class 3 flammable liquids classified in packing groups II or III (e.g. diesel (1202), gas (1203) etc.);
- C. Always maintain proper placard(s) as required by the LTDG relating to the product that the tank contains (e.g.: 1202,1203 or 1375). Remove placards if the tank is purged and cleaned;
- D. Name plates must always be in place and legible;
- E. Never load or unload the tank without having a clean and functional vent in place;
- F. Never fill the tank above the capacity indicated on the name plate. Free space is planned for the expansion of the liquid.
- G. When in stationary mode, the tank must be installed according to an installer whose competence is recognized by local authorities having jurisdiction and in compliance with all applicable installation and building codes and good trade practices.
- H. The owner must understand that it is his responsibility to maintain his tank and keep it free of damage. The requirements are:
  - a. Subscribe to a maintenance program carried out by a skilled technician;
  - b. Visually inspect your tank at least once a year when the product level is low. A light exam will show traces of leaks. Transport Canada requires a 5 year inspection by authorized inspector;
  - c. Inspect the presence of water in the tank yearly and to drain accordingly;
  - d. Protect yourself by contracting a skilled installer if repairs are necessary on the tank itself.
- I. You need to install the four placards 1202 provided prior to usage.
- J. The DT1 was manufactured in Canada. It is a double wall approved with Transport Canada CGSB 43.146-2002(UN31A) and ULC-S601. Also TSSA requirement and DOT approved.
- K. Refer to Operator's Manual for more details. The Operator must read and understand the manual before using the DT1 tank.
- L. Closures in transport: ALL valves and plugs must be shut-off and tightened. Make sure the pump is turned off and the hatch lid is properly closed.
- M. Upon reception, the tank must be cleaned of any residue (EX: calcium, road dust and snow) to protect the quality and paint integrity.
- N. The above conditions are important to prevent damages to the environment or injuries to user.

**INSTRUCTIONS: FOR THE TRANSPORT OF DIESEL FUEL OR GAZ ON CANADIAN ROADS WITH THE DT1 MOBILE IBC (INTERMEDIATE BULK CONTAINER)**

The UN (United Nations) approved Mobile IBC complies with the following regulations: the UK carriage of dangerous goods by road requirements and the European agreement concerning the international carriage of dangerous goods by road (ADR), US DOT and Transport USA. Transport of Dangerous Goods Regulations apply when transporting the IBC empty or full with flammable liquid of Transport packing group III (diesel Fuel- 1202)

**INSTRUCTION FOR USAGE:**

1. Ensure that the IBC placard is fitted to all sides with the correct U.N Number, "Flammable Liquid Class 3- Hazardous Diamond" and the proper shipping name.
2. Ensure that the driver has adequate instruction and training in IBC contents.
3. Ensure driver has appropriate training licence on him or her if required.
1. Ensure documents and retest and Inspection Form included with the tank are carried.
2. Always follow the local or federal road regulations when transporting.
3. Do not allow riders on trailer.
4. Ensure that the DT1 is in good condition and that the certification period has not expired.
5. Ensure that all valves are switched off when not in use and being transported.
6. Take precautions not to spill any fuel on the ground or within the tank at all times when filling DT1 or dispensing fuel.
7. Use a level site

**TO FILL TANK**

1. Open filler cap slowly to relieve pressure (and vent cap if fitted), and fill with nozzle only. DO NOT HARD CONNECT.
2. Watch for level on gauge.
3. When full or adequate amount required, screw the cap in place. Note: Tighten fill cap by hand and then tighten 1/4 turn to minimize the chance of leakage.

**DISPENSING FUEL:**

1. Ensure dispensing nozzle is held while your pump is in use.
2. When finished, ensure nozzle and hose are put back in the pump cabinet. The pump and nozzle must be switched off.

If generator, feed and return line are required, fit your choice of quick couplers to the designated points and pass hoses through the access slot on the sides of the cabinet so that it remains lockable. It is important to use the correct filter to match your diesel engine.



### 3. SAFETY

YOU are responsible for the SAFE operation and maintenance of your DT1 tank. YOU must ensure that you and anyone else who is going to use, maintain or work around the DT1 be familiar with the usage and maintenance procedures and related SAFETY information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be used while using the DT1.

Remember, YOU are the key to safety. Good safety practices not only protects you but also the people around you. Make these practices a working part of you safety program. Make sure that EVERYONE using this equipment is familiar with the recommended usage and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- DT1 owners must give instructions to operators or employees before allowing them to use the tank, and at least annually there-after as per OSHA ( Occupational Safety and health Administration) regulation 1928.57
- The most important safety device on this equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL Safety and Using instructions in the manual and to follow these.
- Anyone who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injuries or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

### 3.1 SAFETY ALERT SYMBOL

#### The safety alert and symbol means



#### **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

The safety Alert symbol identifies important safety messages on the DT1 and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

**SIGNAL WORDS:** Note the use of the signal word **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

#### **DANGER:**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

#### **WARNING:**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

#### **CAUTION:**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### 3.2 GENERAL SAFETY

1. Read and understand the operator's Manual and all safety signs before using, maintaining, adjusting or cleaning the DT1.
2. Have a First aid kit available for use should the need arise and know how to use it.
3. Have a fire extinguisher available for use should the need arise and know how to use it.
4. Wear appropriate protective gear. This list includes but is not limited to:
  - A hard hat
  - Protective shoes with slip resistant soles
  - Protective glasses, goggles or face shield
  - Heavy gloves
  - Protective clothing
5. Install and secure all guards before starting.
6. Do not allow riders.
7. Do not smoke when refueling. Keep sparks, flames and hot material away from the fuel and the DT1 tank.
8. Place all controls in neutral, disconnect power source to pump and wait for all moving parts to stop before servicing, adjusting, repairing or cleaning.
9. Clear the area of people, especially small children, before using the unit.
10. Review safety related items annually with all personnel who will be using the DT1 tank.

### 3.3 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a machine. However, every year, many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist that those working with you, or for you, follow them.
2. In order to provide a better view, certain photos or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be used in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, put the shield back in place prior to use.
3. Never use alcoholic beverages or drugs which can hinder alertness or coordination while using this equipment. Consult your doctor about operating this machine while taking prescription medications.
4. Under no circumstances should young children be allowed to work with this equipment. Do not allow anyone to use or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Review the safety instructions with all users annually.
5. This equipment is dangerous to children and anyone unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with refuelling machinery and trained in this equipment's operations. If anyone with physical limitations are assisting, their limitations need to be recognized and accommodated.
6. Never exceed the machinery's limitations. If its ability to do a job, or to do so safely, is in question-DON'T TRY IT.
7. In addition to design and configuration of this unit, including Safety Signs and Safety equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and storage of the unit. Refer also to Safety Messages and operation instructions in each of the appropriate sections of the unit's manuals. Pay close attention to safety signs affixed to the equipment.
8. Ground and water contamination is a serious offense. Safety measures must be taken when filling DT1 or refueling equipment from Guardian Tanks. Stay and monitor fuel transfers to prevent overfilling or fuel spills on the ground or in the tank gaps.

### 3.4 SAFETY TRAINING

1. Safety is the primary concern in the design and manufacture of our products. Safety also depends on the precautions taken and conscientious operators.
2. In addition to the design and configuration of the equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of the personnel involved in the operation, transport, maintenance and storage of this equipment.
3. It has been said, "The best safety feature is an informed, careful operator." We ask you to be that kind of an operator. It is the operator's responsibility to read and understand ALL safety and usage instructions in the manual and to follow them.
4. Working with unfamiliar equipment can lead to careless injuries. Read this manual before assembly or usage, to acquaint yourself with the machine. It is this machine's owner's responsibility to make sure anyone using the DT1 tank
  - Reads and understands the operator's manuals.
  - Is instructed in safe and proper use.
5. Know your controls and how to shut down the unit quickly in an emergency. Read this manual and the one provided with your equipment.
6. Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will use the machinery. A person who has not read and understood all usage and safety instructions is not qualified to use the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. If anyone with physical limitations are assisting, their limitations need to be recognized and accommodated.

### 3.5 SAFETY SIGN INFORMATION

1. Keep safety signs clean and legible at all times.
2. Replace any safety signs that are either missing, or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety signs displayed in Section 3 each have a part number in the lower right hand corner. Use this part number when ordering replacement parts.
5. Safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.

#### How to install safety signs

- Be sure that the installation area is clean and dry
- Be sure temperature is above 50o F (10oC)
- Determine exact position before you remove the backing paper. (See section 3)
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

### 3.6 PREPARATION

1. Do not use the unit until you have read and completely understand this manual and each of the Safety Messages found on the safety signs on the unit.
2. Personal protection equipment including hard hat, safety glasses, safety shoes and gloves are recommended during the assembly, installation, operation, adjustment, maintenance, repair, removal, cleaning, or moving of the unit. Do not allow long hair, loose fitting clothing or jewelry to be around equipment.
3. **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!** Power equipment with or without equipment attached can often be noisy enough to cause permanent or partial hearing loss. We recommend that you wear hearing protection at all times if the noise in the Operator's position exceed 80db. Noise over 85db, over time, can cause severe hearing loss. Noise over 90db adjacent to the operator over a long period of time may cause permanent total hearing loss. NOTE: Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.
4. Use only in daylight or good artificial light.
5. Make sure that the machine is properly mounted, adjusted and in good using condition.
6. Ensure that all safety shielding and safety signs are properly installed and in good condition.



### 3.7 OPERATING SAFETY

1. Please remember that it is important that you read and recognize the safety signs on the DT1. Clean or replace all safety signs if they cannot be clearly read and understood.
2. Use only for the transport of diesel fuel for refueling equipment or stand-by generators.
3. Keep the tank levelled when filling
4. Fill only with a hand-held trigger nozzle. Take care not to spill any fuel on the ground or in the tank gaps.
5. Do no smoke when refueling. Keep sparks, flames and hot material away from the fuel and the DT1 tank.
6. Do not overfill.
7. Always put the filler cap back in place and turn the pump off (lever down) when refueling is done.
8. Store diesel hose and nozzle inside outer tank.
9. Close all valve outlets and lock lid when transporting on public highway.
10. Follow the regulations for transport of Dangerous Goods.
11. Check for fluid in the outer tank and regularly refer to maintenance manual for detailed procedure.



### 3.8 STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. Do not let children play on or around the stored unit.
3. Store the unit in a dry, levelled area. Support the frame with planks if required.
4. Disconnect all power connections and shut all valves off before storing.

### 3.9 TRANSPORT SAFETY

1. Read and follow the Operator's Manual before using the DT1 tank.
2. Review and follow the User's Notice inside the lid before using or moving.
3. Be familiar with the requirements for "Transport of Dangerous Goods" regulations and follow them.
4. Train all drivers about the requirements of transporting an intermediate Bulk Container (IBC). Do not allow untrained personnel to drive.
5. Be sure each driver has the appropriate drivers licence required by the Federal, Provincial/ State or local authorities.
6. Keep shipping papers describing tank and contents with vehicle at all times.
7. Keep current Retest and Inspection form(s) with the DT1 tank at all times.
8. Keep Transport of Dangerous Goods (TDG) Regulation Placard with the appropriate UN number on each of the vertical side when transporting. Cover placards when tank is empty and purged.
9. Securely anchor tank to truck with bolts before transporting.
10. Turn off pump (move lever down) and close generator port valves.
11. Be sure filler cap is on and closed securely.
12. Be sure all outlets are securely closed/plugged with plugs provided by the manufacturer.
13. Ensure outer tank is empty of spillage.
14. Close and padlock hatch to prevent vibration releasing the catch.

### 3.10 MAINTENANCE SAFETY

1. Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
2. Follow good shop practices.
  - a. Keep service area clean and dry.
  - b. Be sure electrical outlets and tools are properly grounded.
  - c. Use adequate light for the job at hand
3. Make sure there is plenty of ventilation. Never use the engine of the transport vehicle in a closed building. The exhaust fumes may cause asphyxiation.
4. Before working on the machine. Disconnect the power to the pump and close all valves.
5. Do not smoke when performing any maintenance work. Keep sparks, open flames and hot material away from work site.
6. Always use personal protective equipment such as eye, hand and hearing protectors, when performing any service or maintenance.
7. A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on the equipment.
8. Periodically tighten all bolts, nuts and screws and check that all electrical connections are properly secured to ensure unit is in a safe condition.
9. When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.
10. Establish a lock-out tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures.



### 3.11 SAFETY SIGN LOCATION

#### A) INSIDE OF THE LID:

The types of safety signs and locations on the equipment are shown in the illustrations that follows. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.



**OPERATING INSTRUCTIONS**

1. Read "User Notice" and Operator's Manual before using fuel tank.
2. This equipment is designed for the transport of diesel fuel /gas or refueling equipment or generator stand-by.
3. The tank must be level while filling.
4. Fill only with a hand held trigger nozzle. Do not spill on the ground or in the tank.
5. Do no smoke when refuelling. Keep sparks, flames and hot material away from fuel and fuel tank.
6. Do not overfill. 95% capacity is maximum legal limit.
7. Always replace filler cap and turn pump off (lever down).
8. Store diesel hose and nozzle inside outer tank.
9. Close all valve outlets and lock lid when transporting on public highway.
10. Follow the regulations for Transport of Dangerous Goods.
11. Check for fluid in outer tank and empty regularly-refer to maintenance manual for detailed procedure.



**DANGER**



**FIRE HAZARD  
NO SMOKING**

To prevent serious injury or death from fire:

- Do not smoke when refueling
- Keep sparks, flames and hot material away from fuel, gas and DT1 tank.



#### B) STICKERS LIFT:

Install these stickers on each side of the tank (left, right, front and rear)

Example of a 5000L sticker



## 4. OPERATION

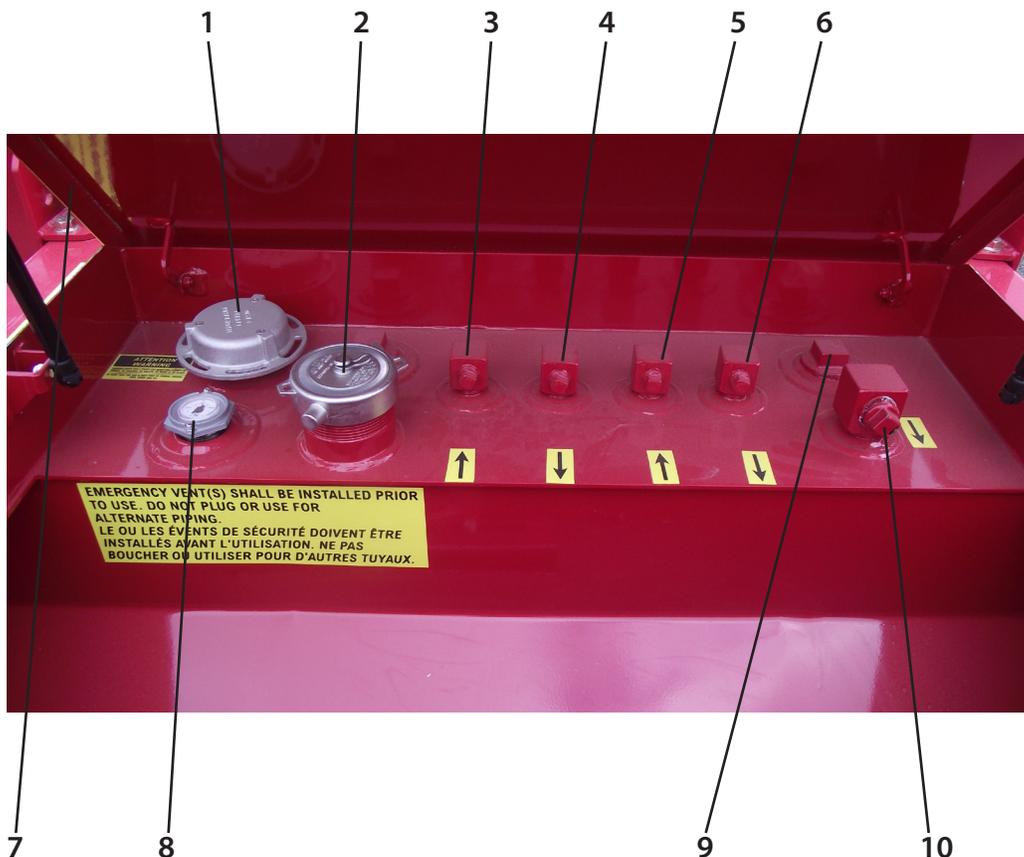
### 4.1 MACHINE COMPONENTS

The DT1 tank is a double wall tank for storing, transferring or transporting fuel. The fuel tank mounts inside the outer tank. The DT1 is designed so the outer tank is large enough to hold all the fluid should the inner fuel tank brake, crack or leak (110% capacity in the gaps).

Close and lock the lid when transporting or not using the tank. The 3 inch fill plug is located on the inner tank along with the fusible cap for venting. A fuel gauge is mounted next to the fill plug to assist in filling the tank.

Power source for the pump must be supplied by the customer. Output and return lines with valves can be connected to an engine operating at a remote location. The outer tank is designed with an access hole for routing fuel lines if required for your application.

An optional volume meter can be mounted under the lid to measure the amount of fuel being dispensed. TDG placards are located on each side of the tank.



1. 2" NPT F. Vent TC (Transport Canada)
2. 3" Fusible fill cap (Emergency vent)
3. 1/2" NPT F. Return (Kit sold separately)
4. 1/2" NPT F. Suction (Kit sold separately)
5. 1/2" NPT F. Return (Kit sold separately)
6. 1/2" NPT F. Suction (Kit sold separately)

7. Hatch lid
8. 1 1/2" NPT F. Level gauge Rochester
9. 2" NPT F. Spare
10. 1" NPT F. Suction pump

NOTE: Complete pump and meter kits sold separately

## 4.2 MACHINE BREAK-IN

Although there are no operational restrictions on the DT1 when used for the first time, it is recommended that the following mechanical items be checked:

### After using 1 to 5 hours

1. Check all nuts, bolts and other fasteners. Tighten to their specified torque level.
2. Check that the fuel lines and connections are in good condition and there are no leaks.
3. Check that the electrical system is in good condition. Be sure all terminals and connectors are clean and fully engaged.
4. Go to the regular service schedule as defined in Section 5 (Retest and Inspection Form)

### Pre-Operation checklist

Efficient and safe operation of the DT1 requires that each operator reads and understands the usage procedures and all related safety precautions outlined in the section. A pre-operation checklist is provided for the operator. It is important for both the personal safety and maintaining the good mechanical condition of the DT1 that this checklist is followed.

### Before using the DT1 and each time there-after, the following areas should be checked off:

1. Check that the DT1 is bolted or anchored to the transporting vehicle.
2. Disconnect and secure all the lines and hoses before transporting.
3. Close and tighten filler cap when tank is full.
4. Turn pump off and disconnect or remove power lines.
5. Check the tank gaps Clean if there is any debris, trash or diesel fuel.
6. Check that all the required documentation and placards are with the unit and in good condition.

### NOTE: SEE reference Installation guide for DT1 Equipment

## 4.3 FIELD USE

The DT1 is designed to efficiently and effectively transfer, transport and refuel equipment in any location. It meets and exceeds all Canadian and U.S. DOT fuel transporting requirements and the UN certification. The IBC's are built to U.S Standard Code of Federal Regulations CFR DOT part 49 section 178.274.

Each owner and user of the DT1 tank should review this manual as part of the regular training and review procedures.

### 1. Owner/Operator Responsibility :

It is the responsibility of each owner, operator or user to be familiar with all regulations that apply to the equipment for transporting, filling, transferring and refueling equipment. Perform all tests per the regulations and maintain the appropriate records and paperwork. Always carry the required paperwork for the Transport of Dangerous Goods. Be sure everyone is properly trained and licensed to use or transport the DT1.



**3. Safety measures for Transport:**

Use ratchet strap to tie down the tank on trailer. Pass at least 2 straps going through the four lifting lugs.



**4. Filling the DT1 tank:**

A fill cap is located on top of the tank and is used to fill it. Close and tighten cap when filling is completed. Follow this procedure when filling tank:

- a. Level the tank or the vehicle that it is mounted on.
- b. Loosen fill cap and lay to the side. Open slowly to release any pressure.
- c. Fill the tank with a hand-held nozzle. Watch the fuel gauge on tank while filling to only go the tank's capacity.
- d. Close and tighten fill cap. And then tighten another ¼ turn to minimize the chance of leakage.
- e. Close and lock the hatch lid

**IMPORTANT:** Do not direct connect. Do not spill any fuel.

## 5. Closure for Transport:

The DT1 must be securely closed prior to moving or transporting to minimize the chance of spilling fuel.

- a. Close and tighten fill cap
- b. Close or plug all auxiliary lines, hoses or other connectors with the plugs provided with the tank.
- c. Stow the hose and hand held nozzle under the cover.
- d. Close and lock hatch-lid on the outer tank.

## 6. Generator Standby:

The DT1 is designed to be used to provide fuel or gas to generator sets or any other power unit requiring fuel.

Follow this procedure when connecting as a fuel supply to an engine:

- a. Place DT1 in a level area adjacent to the engine requiring fuel.
- b. Install quick couplers into the tank outlets appropriate for your application. The feed or return ports are marked with directional arrows.
- c. Use connector components with NPT threads.
- d. Thread the power unit fuel line hoses through the access slots on each side of the frame.
- e. Connect to the quick couplers on the tank outlets.
- f. Start engine.
- g. Close and lock lid to prevent anyone from tampering with the fueling equipment.
- h. Check the fuel gauge and refill the tank when required to prevent running out.



## 7. Refueling

The DT1 works well as a refuelling unit for other tanks, machines or equipment. Review the pump manual prior to using the pump. Follow this procedure when refueling:

- a. Refer Step 4 "Filling DT1".
- b. Transport the DT1 to the refueling area.
- c. Unlock and open hatch lid.
- d. Pull out refueling hose and nozzle.
- e. Extend it to the tank needing to be refueled.
- f. Connect a power supply to the pump
- g. Turn the pump on
- h. Use the hand-held nozzle to transfer the fuel.



## Operation

- i. Turn the pump off when the refueling is completed.
- j. Disconnect the power to the pump.
- k. Store the hose into the bund and hook the nozzle to the storage bracket.
- l. Close and lock the hatch lid.
- m. Move to the next refuelling location

### 8. Fuel Gauge:

The DT1 is equipped with a gauge that displays the amount of fuel in the tank. Always watch the gauge when filling the tank to prevent over-filling.



### 9. Forklifts:

The DT1 base is designed with openings on all sides to allow access for a forklift. A forklift can pick up the tank from any side when it is necessary to raise or manoeuver the unit.



The DT1 is equipped with a sight glass at the bottom left side that allows you to see if there is a leak in the double wall gap.



#### 10. Manway Access cover (manhole):

The top is equipped with a cover to provide access to the inside of the tank after 3 000L. Remove the anchor bolts and cover when it is required to access the tank. Always install a new gasket when re-installing cover.



#### 11. Records:

- Each Owner or operator is responsible to obtain Retest and Inspection Form) from the periodic inspections and retesting of the IBC certification. Keep them with the unit. Place your record and operator's manual in the vinyl sleeve provided on the shelf above the inner tank.
- Keep the Retest and Inspection Form available with the unit and make them available to Government Representatives or Inspectors on site when requested.
- A Retest and Inspection Form is provided with the Documentation package to record the mandatory 5 years testing program at a registered facility. The date and test results must be recorded on the card and stamped on the Specification Plate.

#### 12. Damage:

- Damage can occur during the transportation or usage of the unit. In the event that the inner or outer tank is damaged, impaired or compromised in any way, the tank should be repaired and then retested up to 3 psi.
- Diesel Fuel is a hazardous material and must be treated as such. Do not use the unit if it is damaged and possibly contaminating your worksite and/or the environment. Repair and retest prior to re-use.

#### 13. Parts and Service:

- Transport of Dangerous Goods requires that replacement parts must be of the same specification or equivalent. It is recommended that genuine replacement parts be obtained from AGB Products such as nitrile gaskets, fusible fill cap, pressure/relief vent and gauges.
- Call 1-866-292-8265. Please have your model number, serial number of your DT1 ready and the parts description. Do not return parts.

#### 14. Storage:

The DT1 is designed with the structural strength to allow stacking 3 high when it is either full or empty. Always match the corner brackets together to stabilize the pile.

Use only a hoist or forklift with the required lift capacity to raise, lower or stack the tanks.



#### 15. Power Source:

The best results are obtained when the DT1 is monitored, inspected, checked and tested per this recommended list. Keep and maintain these records.

##### a. During Fuel Transfers:

Someone should be monitoring fuel transfers at all times. Always manually hold the nozzle and release the trigger when transferring into or out the DT1. Visually monitor the fuel gauge while transferring fuel to prevent spilling or overfilling. Remember the maximum legal capacity is 95% full. Do not direct connect.

##### b. Daily Checklist (While in Use):

It is recommended that the tank and all of its components be maintained in good condition at all times. Create a checklist to use when verifying the condition of each component or system. It should include but not be limited to:

- Fuel Level.
- Pipes, tubes, valves and couplers.
- Hoses, broken or damaged components.
- Electrical wires, terminals and connections.

Stop leaks, repair problems and replace any broken components with genuine replacement parts or their equivalent.

c. **Weekly and Before Transporting:**

- Visually check the tank gaps to verify that there have been no leaks from the primary tank or any spills during fuel transfers. If it has any sludge or liquid in it, pump it into an approved container, seal it and dispose of it in accordance with local regulations. Do not pour on the ground or in drains.
- If severe sludge or trash formed in the tank gaps, it is recommended that the inner tank be removed and the outer tank be completely washed out. Do not take chances with contaminating the workplace or the environment.

d. **Monthly:**

- Lubricate the door hinge and lock.
- Clean out pump and line filters including strainer.
- Visually check tank, hoses, pump and other components for cracks, corrosion and leakage.
- Correct all deficiencies before starting. Stop leaks. Make repairs using only genuine replacement parts or their equivalent.

e. **Mandatory 5 year Testing at a Registered Facility:**

The transport of Dangerous Goods requires IBC's to be leak proof tested and inspected internally and externally at a Government Registered Facility with the results being recorded on the Record Card and the date Stamped on the Specification Plate.

**16. Preparation for 5 year testing:**

Cleaning-prior to being leak tested or inspected, the IBC shall be:

- a. Thoroughly drained of all previous loadings.
- b. Interior washed to remove previous loadings.
- c. Interior rinsed to remove liquids.
- d. Exterior washed to remove previous loadings, foreign material, labels and adhesives from all exterior components of the IBC.

The DT1 is manufactured so that it is easy to dismantle for cleaning, servicing, repairs, and inspections. Empty the tank, and follow instructions outlined on the following page.

## 5. CLEANING

Each owner and user of the DT1 should review this manual as part of the regular training and review procedure. Follow all instructions

1. Remove corner sockets.
2. With the inner tank emptied of fuel, lift it out using the lifting eyes.
3. Clean the inside of the outer tank (bund). Remove all debris and liquids.
4. Remove the access cover, lift up the back end of the inner tank, and draw off any residue with a pipe inserted into the tank.
5. If it is necessary to access the tank, precautions should be taken, and a safe working procedure drawn up and followed.
6. The tank should be drained, pressure washed and then dried. An internal inspection can now be made



It is recommended the leak test is carried out after the internal inspection. Replace pressure/vacuum relief valve with a plug for the leak test. Reassemble the tank and install a new gasket around the access cover. Tighten to 60 ft. /lbs. torque to ensure there is no leakage.

- Install a new pressure/vacuum relief valve that is available from AGB Products.
- Leak proof test at 20 kpa for 10 minutes.
- Keep records of testing with the unit at all times.

## **6. LIMITED WARRANTY POLICY (LWP):**

- a. AGB's (manufacturer of Guardian Tanks) LWP on its DT1 tanks (leaks and paint) is one (1) year from purchase, if the tank is used reasonably and that all points below are respected (including User Notice). The accessories have the original manufacturer warranty.
- b. In the event of tank manufacturing defects, the company will assume costs for repairs occurring in our facility or, at AGB's discretion, replace said tank. All other fees or monies lost due to the tank defect and/or the tank replacement are not the responsibility of the company. Freight costs are not covered by the LWP and are therefore the client's responsibility;
- c. Any modifications made to the tank, any use considered as abusive or negligent voids its LWP;
- d. When being transported with product inside, the tank must be secured to the vehicle using all anchor points and bolt holes provided by manufacturer for LWP to be honored;
- e. For more information on our LWP, please contact one of our company representatives.

## 7. TROUBLESHOOTING

The DT1 is a double walled tank for transporting diesel fuel from one location to another. It is a simple and reliable system that requires minimal maintenance.

In the following section, we have listed many of the problems, causes and solutions to the problems that you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this troubleshooting section, please call your local distributor or manufacturer. Before you call, please have this Operator's Manual from your unit and serial number ready.

| PROBLEM                     | CAUSE   | SOLUTION  |
|-----------------------------|---|---|
| Pump will not run           | No power<br>pump off                                | Connect power wires to 12 volt power source.<br>Turn pump on.               |
| Diesel fuel in tank<br>gaps | Loose fitting<br>Leaking coupler<br>Tank overfilled | Tighten fitting<br>Replace coupler<br>Keep an eye on gauge, do not overfill |
| Water in tank<br>gaps       | Latch lid opened<br>to weather                      | Keep lid closed   |

## 8. RETEST AND INSPECTION FORM

Included with tank.

## 9. SPECIFICATION

| Specifications - Standard Tanks |                |           |         |             |                        |                          |             |      |             |       |                      |          |         |
|---------------------------------|----------------|-----------|---------|-------------|------------------------|--------------------------|-------------|------|-------------|-------|----------------------|----------|---------|
| ITEM#                           | Approx. Volume |           |         | Type        | Primary tank thickness | Secondary tank thickness | Tare Weight |      | Full weight |       | Approx. All out dims |          |         |
|                                 | L              | Gal. Imp. | Gal. US |             |                        |                          | Kg          | lbs  | Kg          | lbs   | L (in)               | I (in)   | H (in)  |
| AGB-DT1-0500                    | 500            | 110       | 132     | DOUBLE WALL | 11 ga                  | 12 ga                    | 396         | 872  | 896         | 1975  | 46 3/4"              | 52 3/4"  | 34 1/2" |
| AGB-DT1-1000                    | 1000           | 220       | 264     |             | 11 ga                  |                          | 548         | 1207 | 1548        | 3413  | 56 3/4"              | 47 3/4"  | 48 1/2" |
| AGB-DT1-2000                    | 2000           | 440       | 528     |             | 11 ga                  |                          | 874         | 1925 | 2874        | 6336  | 52"                  | 90 3/4"  | 48 1/2" |
| AGB-DT1-3000                    | 3000           | 660       | 793     |             | 1/4                    |                          | 1526        | 3363 | 4526        | 9978  | 67 1/2"              | 92 3/4"  | 51 1/2" |
| AGB-DT1-4000                    | 4000           | 880       | 1057    |             | 1/4                    |                          | 1899        | 4186 | 5899        | 13005 | 88 5/8"              | 91 7/8"  | 51 1/2" |
| AGB-DT1-5000                    | 5000           | 1100      | 1321    |             | 1/4                    |                          | 2206        | 4863 | 7206        | 15887 | 91 7/8"              | 107 5/8" | 51 1/2" |

Specification subject to change without notice

## **10. ADDITIONAL INFORMATION**

**Manufactured by: AGB Products**

164 Mgr Martin East Rd.

St-Quentin NB, Canada

E8A 1W1

Phone: 506-235-2243

Toll Free: 866-292-6265

Website: [www.agbproducts.com](http://www.agbproducts.com)

Email: [info@agbproducts.com](mailto:info@agbproducts.com)

