

MERIDIAN[®]

FUEL TANKS

10,000L - 100,000L



OPERATOR'S MANUAL

SIGN-OFF FORM

Meridian Manufacturing Inc. follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE), and the Occupational Safety and Health Administration (OSHA). Anyone who will be using or maintaining the bin must read and clearly understand ALL Safety and Maintenance information presented in this manual.

Review this information annually, before the season start-up.

Make these periodic reviews of SAFETY and USAGE a standard practice for all of your equipment.

This form is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in this manual. Copy this page to continue record.

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PRODUCT REGISTRATION FORM



Attention Dealers:

You can register products online through the Dealer Login: <http://dealers.meridianmfg.com/login/>

It is mandatory to register your product in order to qualify for future warranty claims that may arise. Knowingly falsifying information on this form will result in the voiding of the product warranty.

You may scan/photograph this completed form (must be legible), email it to: register@meridianmfg.com

A copy of this form may also be mailed to Meridian Manufacturing Inc.

Buyer's Name	_____	Dealer's Name	_____
Address	_____	Address	_____
City, Prov/State	_____	City, Prov/State	_____
Postal/Zip Code	_____	Postal/Zip Code	_____
Phone Number	_____	Phone Number	_____

Note: Registering a product in multiple entry format is only allowed when the product has the same model number and the same dealer, however each serial number must be legibly listed for each unit. Delivery dates for a multiple entry must be within a one month time frame.

Product Information _____

Model # _____ Serial # _____

Invoice Date _____

Important: Please send this form to the Meridian Manufacturing Inc. location which built this product being registered. If you require further assistance call you're dealer or the Meridian outlet nearest to your location.

We want to thank you for purchasing a Meridian manufactured product. Whether this is your first Meridian purchase or you have been a customer for years, you are now part of the Meridian community of customers and we appreciate your business.

It is important that you now complete the product registration information and this form indicating you have received delivery. This registration and information is necessary to ensure you have access to warranty and product updates in the event it be required in the future.

Registration can be completed by using this form or visiting your dealer who will complete the form online. You will be given access to the Meridian Community and become eligible for updates, special offers and prizes.

Again, thank you for choosing Meridian.

I have thoroughly instructed the buyer on the above described equipment. The review included the content of this manual, equipment care, adjustments, safe operation and warranty policy.

Date _____ Dealer's Signature _____

The above equipment and this manual have been received by me. I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date _____ Buyer's Signature _____

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Section 1: INTRODUCTION

Thank you for choosing a Meridian® Fuel Tank.

Codes, Regulations and Guidelines:

Designed and built to meet CAN/ULC-S601-14 standards for strength and durability. Your fuel tank will give years of environmentally safe, trouble free use. To ensure this performance, it is critical that everyone who will be working around or maintaining the tank, read and understand the Safety, Operation and Maintenance information within this manual.

Fuel storage tanks fall under a variety of governmental jurisdictions; therefore the references in this manual are provided only as a general outline. You may be subject to different legislation and governing bodies in your specific location.

IT IS THE TANK OWNER'S RESPONSIBILITY TO DETERMINE WHAT CODES AND REGULATIONS MUST BE FOLLOWED IN YOUR LOCAL AREA

Meridian Manufacturing Inc. assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from, the use of this manual.

Information provided herein is of a descriptive nature. Meridian Manufacturing Inc. reserve the right to modify the equipment design and specifications without any preliminary notice.

1.1 SERIAL NUMBER

The serial number is located at the rear.

Have the serial number available when communicating with the dealer or factory and requesting service or asking for information.

Tank Model No: _____

Tank Serial No: _____

Auxiliary Equip: _____



Fig 1 - Serial number located at the rear of tank

Meridian® Fuel Tanks are designed to meet CAN/ULC-S601-14 standards for strength and durability. They can accommodate a variety of fuel types and features a 100% containment system that is designed to prevent costly leaks.

Standard Features:

- CAN/ULC-S601-14 Approved
- 100% Secondary Containment
- Heavy Gauge Construction
- Two fully welded heavy duty saddles
- Lifting Lugs
- Emergency Vents
- Spare Fittings/Ports
- Ladder and Platform
- Spill Box with Fill Port and Dip Port (Not included with Econo Tank)
- Premium Powder Coat Finish
- Dip Stick and Side Dip Stick Holder

Note:

Images shown include the optional skid base for measurement purposes.

Letters refer to the measurements in the table on the next page.

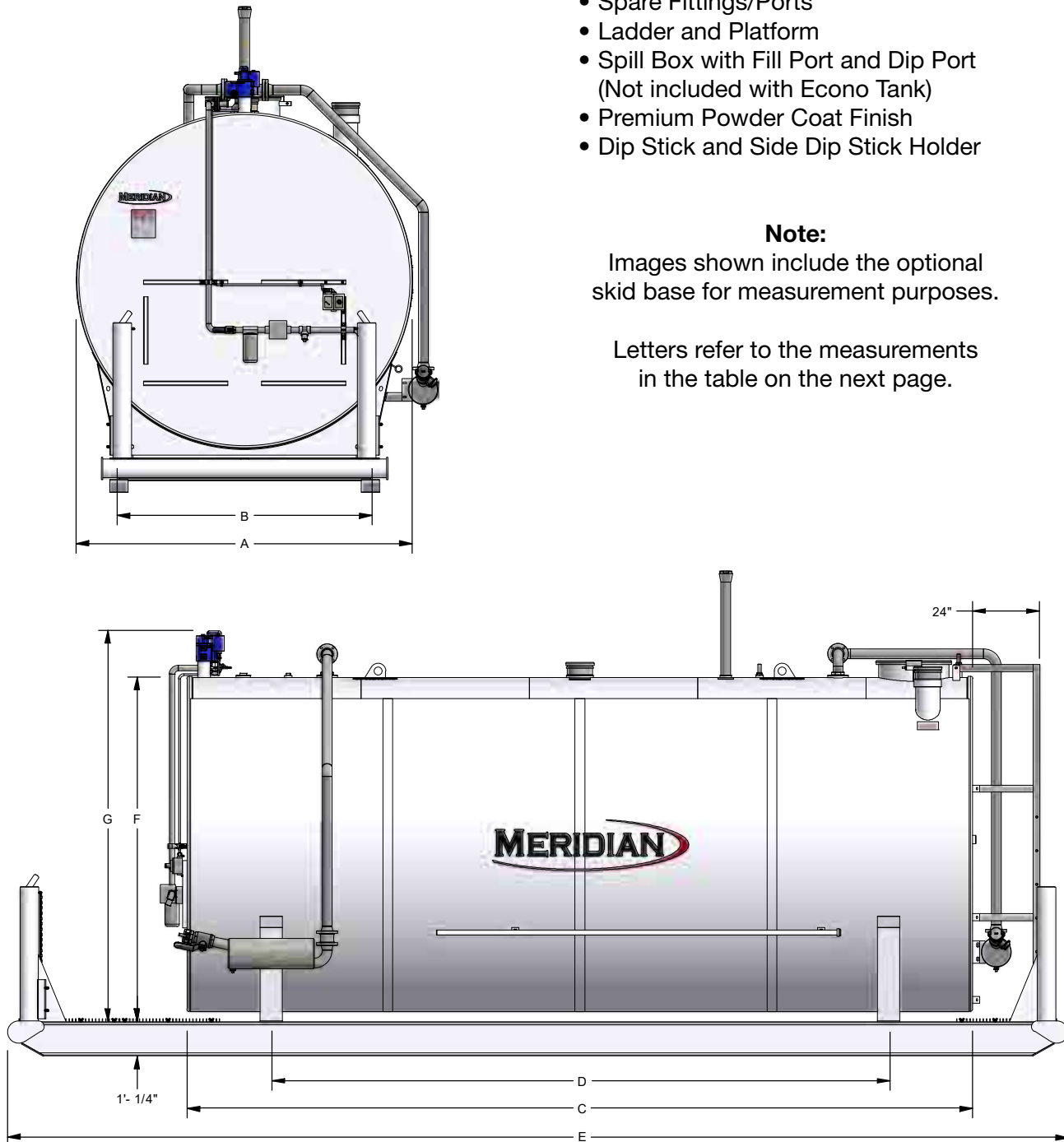


Fig 2 - Tank measurements, shown with optional skid

Table 1 - Tank Weights

MODEL	ITEM #	VOLUME	TANK WEIGHT (EMPTY)	SKID WEIGHT	WEIGHT W/SKID	BOTTOM FILL WEIGHT
MDW-10000	64100	10,600 L (2332 Imp G)	1627 kg (3588 lb)	396 kg (872 lb)	2023 kg (4460 lb)	N/A
MDWE-15000	64088	15,000 L (3300 Imp G)	2727 kg (6011 lb)	N/A	N/A	129 kg (284 lb)
MDWE-25000	64089	25,000 L (5499 Imp G)	4023 kg (8870 lb)	N/A	N/A	129 kg (284 lb)
MDWE-35000	64090	35,000 L (7699 Imp G)	5380 kg (11860 lb)	N/A	N/A	129 kg (284 lb)
MDW-15000	64003	14,800 L (3256 Imp G)	2590 kg (5710 lb)	922 kg (2032 lb)	3512 kg (7743 lb)	129 kg (284 lb)
MDW-25000	64010	24,900 L (5477 Imp G)	3613 kg (7965 lb)	1104 kg (2435 lb)	2140 kg (4717 lb)	129 kg (284 lb)
MDW-35000	64035	35,000 L (7699 Imp G)	4713 kg (10390 lb)	1284 kg (2831 lb)	5997 kg (13,221 lb)	129 kg (284 lb)
MDW-50000	64050	50,000 L (10,998 Imp G)	6804 kg (15000 lb)	1655 kg (3649 lb)	8459 kg (18,649 lb)	138 kg (304 lb)
MDW-65000	61413	65,100 L (14,320 Imp G)	8301 kg (18300 lb)	1890 kg (4167 lb)	10,191 kg (22,467 lb)	138 kg (304 lb)
MDW-75000	64076	75,800 L (16,674 Imp G)	9226 kg (20340 lb)	2983 kg (4576 lb)	12,209 kg (26,916 lb)	138 kg (304 lb)
MDW-100000	64105	99,500 L (21,887 Imp G)	12,756 kg (28,122 lb)	2388 kg (5265 lb)	15,144 kg (33,387 lb)	142 kg (314 lb)

Table 2 - Tank Measurements

MODEL	ITEM #	TANK DIAMETER (A)	INTERNAL DIMENSION (ID X LENGTH)	SKID WIDTH (B)	TANK LENGTH (C)	LENGTH BETWEEN SADDLES (D)	LENGTH w/ EXT-SKID (E)	TANK OVERALL HEIGHT (F)	PUMP OVERALL HEIGHT (G)
MDW-10000	64100	64"	63" ID x 209"	4' 9"	17' 5"	14' 11"	23' 9"	5' 8"	7' 2"
MDWE-15000	64088	90"	89" ID x 147"	5' 4"	12' 4"	N/A	N/A	8'	9' 7"
MDWE-25000	64089	90"	89" ID x 247"	5' 4"	20' 7"	N/A	N/A	8'	9' 7"
MDWE-35000	64090	90"	89" ID x 349"	5' 4"	29' 1"	N/A	N/A	8'	9' 7"
MDW-15000	64003	90"	89" ID x 147"	6' 6"	12' 4"	8' 7"	19' 7"	7' 9"	9' 1"
MDW-25000	64010	90"	89" ID x 247"	6' 6"	20' 8"	16' 11"	27' 11"	7' 9"	9' 1"
MDW-35000	64035	90"	89" ID x 349"	6' 6"	29' 2"	25' 5"	36' 1"	7' 9"	9' 1"
MDW-50000	64050	120"	118" ID x 279"	7' 7"	23' 4"	18' 4"	31' 6"	10' 3"	11' 7"
MDW-65000	61413	120"	118" ID x 363"	7' 7"	30' 4"	25' 4"	38' 6"	10' 3"	11' 7"
MDW-75000	64076	120"	118" ID x 423"	7' 7"	35' 4"	30' 4"	43' 6"	10' 3"	11' 7"
MDW-100000	64105	10' 7"	125" ID x 495"	8' 6"	41' 4"	36' 1"	49' 6"	10' 8"	12'
Skid bed is 1' 1/4" thick • Rear Ladder is 24" wide • Rear Staircase is 29" wide									



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Section 2: SAFETY

3 Big Reasons why safety is important to you:

- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

The Safety Alert Symbol means:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

The Safety Alert Symbol identifies important safety messages on the fuel tank and in this manual.

The following signal words are used in this manual to express the degree of hazard for areas of personal safety.

When you see the symbol and/or the signal words described below, obey the accompanying message to avoid possible injury or death.



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



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



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



Indicates practices or situations which may result in the malfunction of, or damage to equipment.



Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

2.1 SAFETY ORIENTATION

YOU are responsible for the SAFE usage and maintenance of your Meridian® Fuel Tank. Be sure that everyone who will maintain or work around it, is familiar with the safety, maintenance procedures.

This manual will take you step-by-step through your working day. It will alert you to all the safe practices that should be adhered to while using the tank.

It has been said, "The best safety feature is an informed, careful worker" Good safety practices not only protect you but also the people around you. Make these practices a dynamic part of your workday.

Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Fuel tank owners must give instructions to employees before allowing them to use the tank.

Procedures must be reviewed annually thereafter, as per OSHA (Occupational Safety and Health Administration) regulation 1928.57.

- Develop a comprehensive safety program for your work area.
- The most important safety device is a SAFE worker. It is their responsibility to understand all safety and usage instructions in this document, and to follow them.
- An untrained worker exposes himself and bystanders to possible serious injury or death.
- Think SAFETY! Work SAFELY!

2.2 GENERAL SAFETY

- You are responsible for the safe use and maintenance of this tank. Good safety practices not only protect you, but also those around you. All accidents can be avoided.



- Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.



- Use this fuel tank for its intended purpose only.
- This tank is not intended for use by children.

2.3 EQUIPMENT SAFETY GUIDELINES

- Safety of the workers and bystanders is one of the main concerns when designing and developing this fuel tank. 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.
- DO NOT allow personnel to use this tank until they have read this manual. They should have a thorough understanding of the safety precautions.

Review the safety instructions with all users annually.

- DO NOT modify the tank in any way without written permission from the manufacturer. Any unauthorized modification of the fuel tank will void the warranty.

2.4 ENVIRONMENTAL REGULATIONS

- The fuel tank installer shall ensure that all environmental requirements are taken and implemented in accordance with the local authority having jurisdiction.
- This tank must be installed by a qualified tank installer who shall consult with the proper authorities with jurisdiction to ensure all requirements of CAN/ULC-S601-14 and all Federal, Provincial and Local codes are being met prior to installation. Failure to do so, could void your warranty.
- **Protect Fuel Tank Against Vehicle Traffic:**
The installer is to ensure that the fuel tank is adequately protected against damage from vehicular traffic in compliance with all Federal, Provincial and Local Codes.
- **Regular Inspection and Maintenance:**
The fuel tank is to be inspected annually and any repairs to the exterior coating shall be made at the time of inspection in accordance with the coating manufacturer's instructions.

2.5 FUEL TANK SAFETY

- Do not lift or transport the tank when it contains fluid.
- Install the tank away from buildings, property lines, public paths or high traffic areas.
- Protect the tank against damage from vehicular traffic in compliance with all Federal, Provincial and Local Codes.
- Install the tank on a well prepared, level base designed to hold the tank full of liquid.

2.6 SAFETY DECALS

- Keep safety decals clean/legible at all times.
- Replace safety decals that are missing or have become illegible.
- All safety decals have a part number in the lower right hand corner. Use this part number when ordering replacements.
- Safety decals are available from your authorized distributor, dealer's parts department or from the factory.

2.6.1 Applying Decals:

1. Be sure the application area is clean and dry. Ensure the surrounding temperature is above 10°C (50°F).
 - a. Remove all dirt, grease, wax from surface.
 - b. Clean with a non-ammonia based cleaner.
 - c. Wipe the clean surface with isopropyl alcohol on paper towel, and allow to dry.
2. Determine the exact position before you remove the backing paper.
3. Peel a small portion of the split backing paper.
4. Align the decal over the specified area. Use a squeegee to carefully press the small portion, with the exposed adhesive backing, into place.
5. Slowly peel back the remaining paper and carefully smooth the rest of the decal into place.
6. Small air pockets can be pierced with a pin and smoothed out using the squeegee, or a piece of sign backing paper.

2.7 SAFETY DECAL LOCATION



1. ULC Plate (part #20027)
Located on rear of tank



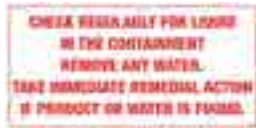
2. Serial Number Decal
Located below ULC Plate



10. Warning Falling Hazard Decal (part #19961)
Located next to ladder



3. Emergency Venting Decal (part #20105)
Located below emergency vents



4. Containment Inspection Warning Decal (part #20045)
Located below containment inspection port



5. Lifting Lug Warning Decal (part #19037)
Located below lifting lug



6. Vent Warning Decal (part #20026)
Located below 3" port



7. Fill Warning Decal (part #20022)
Located below vented fill cap



8. Danger Safety Decal (part #20048)
Located on both ends of tank



9. Consult Authority Decal (part #20046)
Located on front, below safety decal

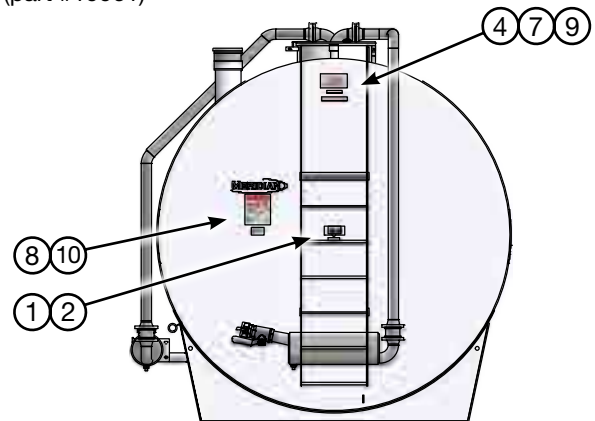


Fig 3 - Rear of fuel tank

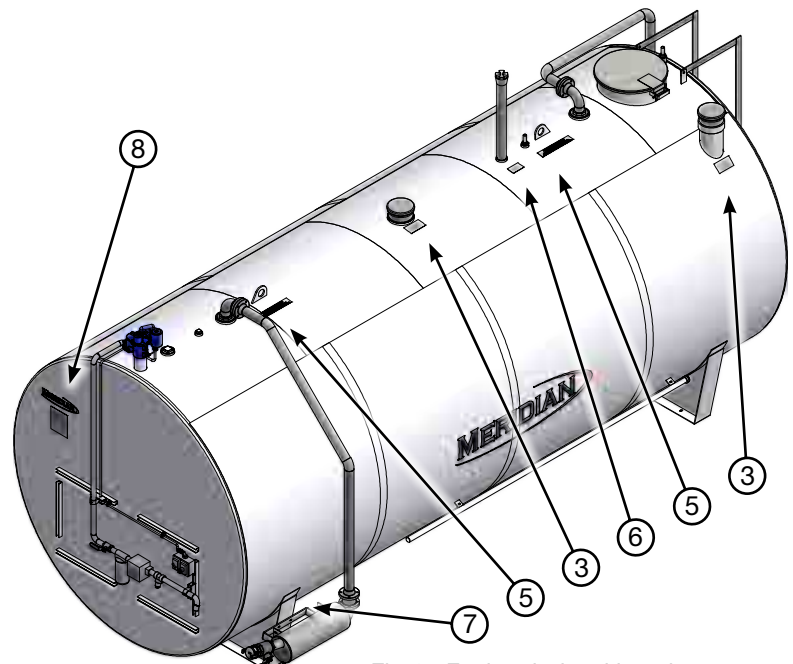


Fig 4 - Fuel tank decal location

2.8 FUEL TRANSFER SAFETY

- Procedures must be in place when transferring fuel from a delivery vehicle to the tank. Although some transfer procedures are unique to those facilities, the following general safety procedures must always be followed:
 - DO NOT smoke when operating or refueling the fuel tank.
 - Keep sparks, flames & hot material away from the fuel tank.
 - Turn vehicle ignition off and remove key from ignition before refueling.
 - Keep vehicles at least 1.5 m (5') away from the fuel tank at all times.
 - Never leave the tank unattended while refueling is in process.
 - DO NOT overfill. 95% capacity is the maximum legal limit.
 - Always turn pump off when finished fueling operations.
 - Always store pump nozzle in drip pot when not in operation.
- ALWAYS determine how much fuel your tank can safely hold. Over-filling the tank will cause spills.
 - Check the fuel level by dip checking the tank prior to any fuel transfer.
- Determine a Safe Gauge Height (SGH) this is how much fuel a tank can hold allowing for expansion due to temperature variations.
 - 90% full in the summer months
 - 95% full in the winter months
- ALWAYS start the fuel transfer at a reduced rate. This reduces the potential for the build up of static electricity.
- ALWAYS maintain good communication with the driver of the delivery vehicle. Poor communication between the tank operator and the delivery driver often leads to spills and accidents.



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Section 3: SITE AND INSTALLATION

WARNING

- Read and understand the Operator's Manual, and all safety decals, before using.
- Never lift or attempt to transport tanks containing fluid.
- Inspected the fuel tank annually.
- Ensure that all environmental requirements are taken and implemented in accordance with the local authority having jurisdiction.
- Ensure that the fuel tank is adequately protected against damage from vehicular traffic in compliance with all Federal, Provincial and Local Codes.

This document only covers general installation instructions. Consult the correct authority having jurisdiction in your area prior to tank installation.

IMPORTANT:

This tank must be installed by a qualified tank installer who shall consult with the proper authorities with jurisdiction to ensure all requirements of CAN/ULC-S601-14 and all Federal, Provincial and Local codes are being met prior to installation. Failure to do so, could void your warranty.

Note:

All timber/crates used in shipping must be completely removed from the tank prior to installation.

Choosing a Location:

The tank shall be placed at a safe distance from buildings, other tanks, roadways, waterways, property lines and all public paths. Refer to local authorities for applicable codes.

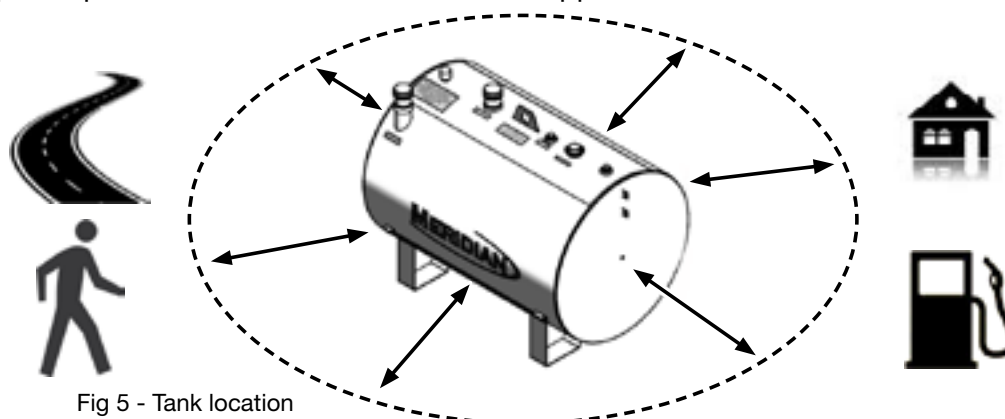


Fig 5 - Tank location

3.1 TANK FOUNDATION

The foundation specifications will depend on your local soil conditions.

Meridian Manufacturing Inc. will not assume any liability for results arising from a poorly prepared foundation.

Meridian strongly advises you to consult a civil engineer regarding the site you choose. A professional engineer will check the soil conditions and soil load bearing capacity. They can use the tank's empty and full weights to advise on preparing the proper base.

The site should be in a well-drained location with all silt, organic, and loose soil removed. Topsoil should be excavated, and a gravel foundation be laid.

The gravel foundation should be **FIRMLY PACKED**, uniform, level and extend beyond the perimeter of the tank. It should not vary by more than 1/4" over a span of four feet. It must be capable of carrying 100% of the weight of the full tank.

The tank skid, saddle or cradle shall be the only part of the tank in contact with the foundation or base.

3.2 TANK INSTALLATION

Lifting and Transporting Fuel Tanks:

Only the lifting lug weldments on the tank shall be used for unloading or transporting the empty fuel tank. **DO NOT** lift or transport tanks containing fluid at any time.

Inspecting Fuel Tanks:

The tank installer shall ensure that all fittings, have not loosened during transportation. They must be sealed and tight.

Check all painted areas of the tank for damage due to shipping and also at final installation. All scratched or scuffed areas must be touched up with paint prior to use. If the damages are deemed to affect the integrity of the tank, contact your distributor or dealer prior to putting any product in the tank.

Tank Venting:

The emergency vents are installed by Meridian. The normal vent is to be field-installed by a qualified tank installer prior to use of the tank to prevent pressure or vacuum inside the tank during filling, emptying, or atmospheric temperature changes that may occur.

Containment Inspection:

The containment tank should be checked on a regular basis, to confirm that neither precipitation nor product has accumulated therein. The disposal of any liquid found in the containment shall be disposed of in accordance with the requirements of the authority having jurisdiction.

Overfill Protection:

The tank installer must ensure that an approved OVERFILL PROTECTION DEVICE is installed in the tank prior to the tank being filled with any fuel.

Fuel Level Inspection Port:

This port is located in the 25" Spill Box on top of the tank. The 2" lockable port allows the tank to be probed with the dip stick located on the side of the tank in order that the remaining level of fuel is established (refer to the tank depth chart in the owner's manual) before the refueling of the tank begins.

Spill Box Connection:

Ensure the hose is properly secured to the 3" connection inside the Spill Box before refueling begins. Never leave while refueling the tank. After the refueling process is completed, drain the hose before disconnecting to eliminate any spilling of fluid. Attach the fill cap and close the Spill Box lid.

Bottom Fill System (Optional):

The 3" bottom fill system has a one way valve installed at the factory to prevent fuel from flowing back down the fill line. Ensure the one-way valve has not been tampered with and is installed correctly (arrow pointing up). Secure the fill hose to the three inch bottom fill connection and then open the ball valve on the bottom fill before beginning the refueling process. Never leave while the refueling of the tank is in process. After refueling is complete drain the hose to eliminate any chance of spilled fuel. Close the ball valve, remove the hose and replace the fill cap on the bottom fill.

Inspecting Fuel Tank Containment System:

The containment should be checked on a regular basis, to confirm that neither product nor water has accumulated therein. Take immediate remedial action if product or water is found. The disposal of any liquid found in the containment shall be disposed of in accordance with the requirements of the authority having jurisdiction.

Environmental Regulations:

The fuel tank installer shall ensure that all environmental requirements are taken and implemented in accordance with the local authority having jurisdiction.

Protect Fuel Tank Against Vehicle Traffic:

The installer is to ensure that the fuel tank is adequately protected against damage from vehicular traffic in compliance with all Federal, Provincial and Local Codes.

NOTICE**CORROSION HAZARD**

Microbial corrosion can be caused by water & debris getting into the tank.

Regular Inspection and Maintenance:

The fuel tank must be inspected regularly. All repairs to the exterior coating shall be made at the time of inspection in accordance with the coating manufacturer's instructions.

Refer to the Petroleum Equipment Institute (PEI) website or Steel Tank Institute for more information on removing water and debris, and preventing corrosion inside the tank.



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Section 4: OPERATION

WARNING

- Read and understand the Operator's Manual, and all safety decals, before using.
- DO NOT smoke when operating/refueling the fuel tank.
- Keep sparks, flames & hot material away from the fuel tank.
- Be sure tank skid is properly secured so it cannot shift or move when the tank is empty or full.
- Turn vehicle ignition off and remove key from ignition before refueling.
- Keep vehicles at least 1.5 m (5') away from the fuel tank at all times.
- NEVER leave the tank unattended while refueling is in process.
- ALWAYS turn pump off when finished fueling.
- DO NOT OVERFILL. 95% capacity is the maximum legal limit.
- ALWAYS store pump nozzle in drip pot when not in operation.
- ALWAYS determine how much fuel your tank can safely hold. Over filling the tank will cause spills. Check the fuel level by dip checking the tank prior to any fuel transfer.
- ALWAYS start the fuel transfer at a reduced rate. This reduces the potential for the build up of static electricity.
- ALWAYS maintain good communication with the driver of the delivery vehicle.

Hazard controls and accident prevention are dependent upon the personnel operating and maintaining the equipment. Their awareness, concern, prudence and proper training are crucial.

It is the responsibility of the owner and operators to read this manual and to train all personnel before they start working with this tank. By following recommended procedure, a safe working environment is provided for the operator, co-workers and bystanders in the area around the work site.

4.1 TANK COMPONENTS

Port and vent sizes may vary. Component positions may change, depending on tank size and included options.

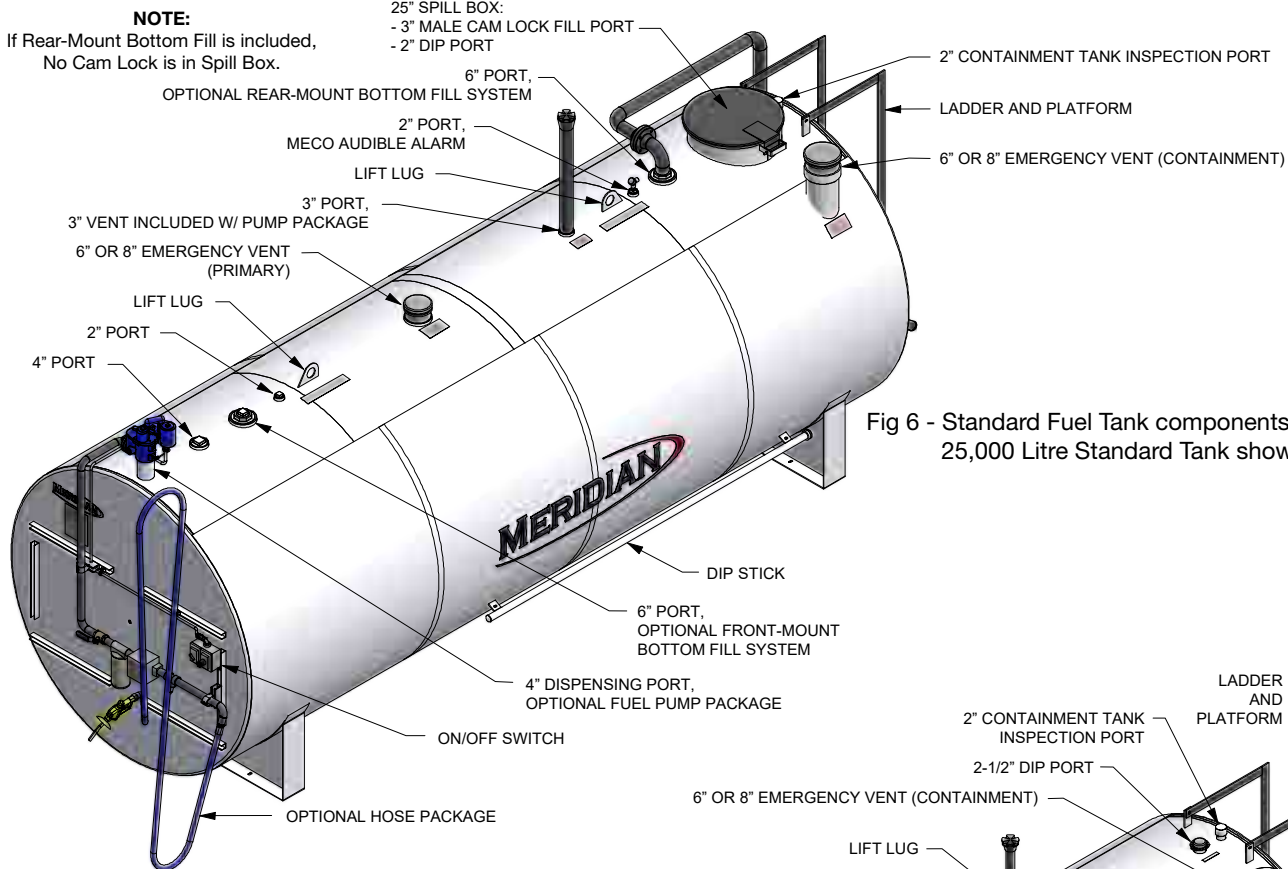


Fig 6 - Standard Fuel Tank components,
25,000 Litre Standard Tank shown

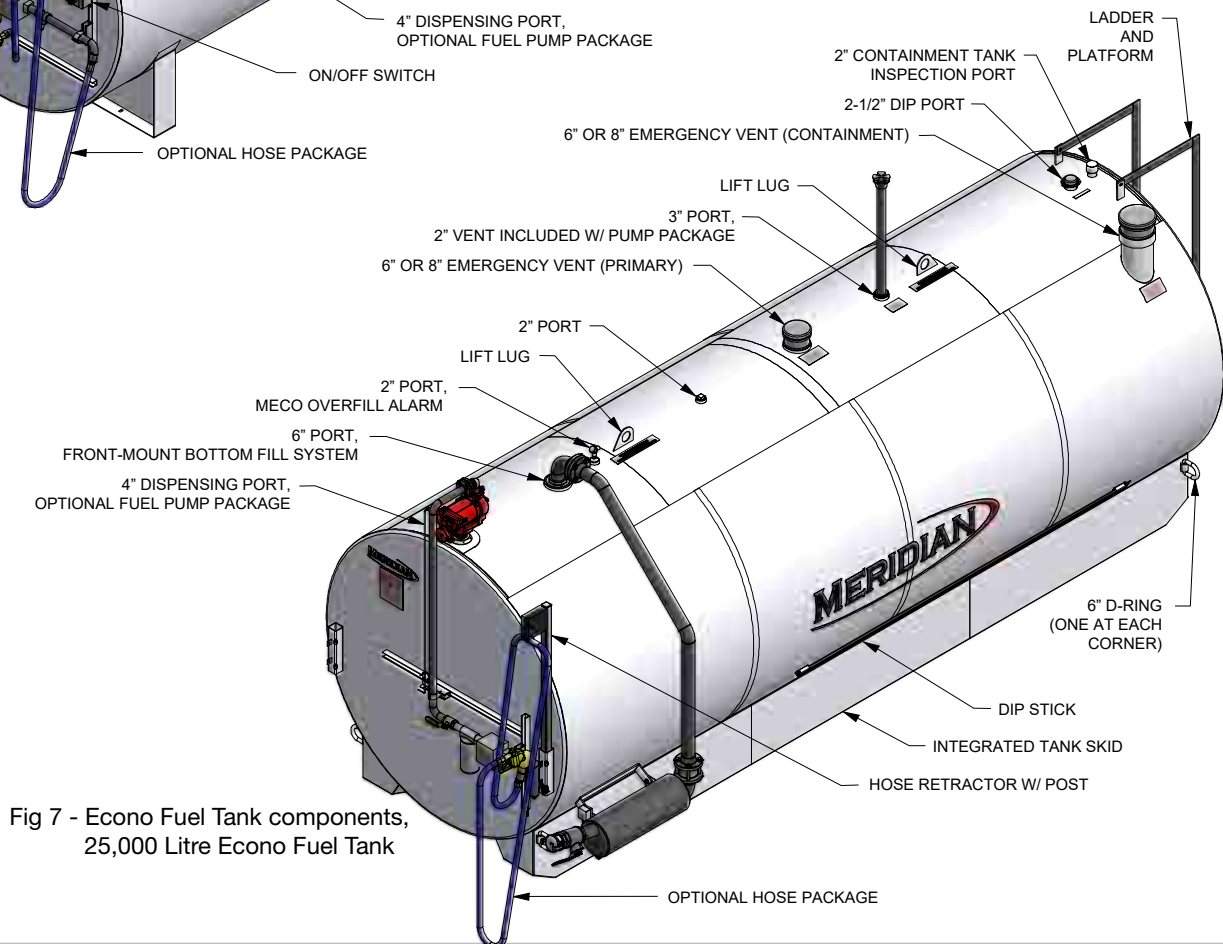


Fig 7 - Econo Fuel Tank components,
25,000 Litre Econo Fuel Tank

4.2 COMPONENTS AND CONTROLS

Before working with this tank, all operators must familiarize themselves with the location and function of the components and controls.

Locations of components and options may vary.

Liquid Level Gauge:

This gauge give a general reading of the amount of fuel in the tank.

IMPORTANT:

Do not depend on Level Gauge when filling the tank. Use dipstick and dip chart.

Always dip and measure level **before** and **after** filling the tank.

Spill Box:

Inside the 25" Spill Box is the 3" Fill port, covered by a male cam lock, and 2" Dip port.

Note: If tank is equipped with a Rear-Mount Bottom Fill isystem, there will be no Cam Lock in the Spill Box.

2" Containment Tank Inspection Port:

The Inspection Port is on the end of the tank beside the Spill Box. See Figure 9.

- An optional Leak Detection Gauge can be added to the port.

Emergency Vents:

- The primary emergency vent is located at the centre of the tank. See Figure 10.
- A secondary containment vent is positioned along on the side, at the rear of the tank.



Fig 8 - Liquid level gauge



Fig 9 - Containment Inspection Port w/ Leak Detection Gauge



Fig 10 - Primary emergency vent

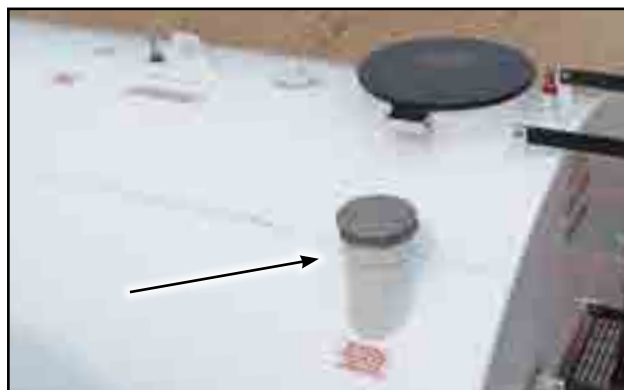


Fig 11 - Secondary containment emergency vent

NOTICE

LIFTING HAZARD
Never lift tank with fuel inside.

Lifting Lugs:

There are two Lifting Lugs on the tank.

Various Sized Ports:

Depending on the size of tank, there are 2", 3", 4" and 6" ports along the top, to accommodate the optional equipment.

Dip Stick:

A dip stick is provided, and is stored along the side of the tank. See Figure 12.

Ladder and Platform:

A ladder and platform are attached to the rear of the tank, for access to the Fill and Dip Ports.

Econo Style Tank (Optional):

This style tank includes a fully integrated skid base which is the full length of the tank.

Standard or Extended Skids (Optional):

The tank can be placed on a skid base.

- The Standard Skid is the length of the tank.
- The Extended Skid includes a platform at the front and rear of the tank.

Explosion Proof On/Off Switch & Light:

The indicator light illuminates when the pump is ON, as a reminder to turn it OFF when refueling is complete.



Fig 12 - Dip stick holder and ladder



Fig 13 - Econo style tank



Fig 14 - Tank with extended skid



Fig 15 - Fill-Rite and On/Off Switches

Fill-Rite 901 Meter:

This meter indicates the number of litres used at the time of re-fueling, and also a continuous read-out of the total litres used. See Figure 15

Bottom Fill System (Optional):

The bottom fill system can be installed at the front and/or rear of the tank. The system is available with:

- MECO audible overfill alarm
- Automatic shutoff valve

The end of the bottom fill tube contains a male cam lock and a ball valve. Located just above the elbow, is the one-way valve, which will prevent fuel from siphoning back.

Fuel Pump and Delivery System:

There are various options available for the fuel pump and delivery system. All operators must know the system used on their tank.



Fig 16 - MECO Overfill Alarm is connected to the fill tube



Fig 17 - Bottom fill tube with cam lock



Fig 18 - Pump and Delivery system

4.3 INSTRUCTIONS FOR FUEL DELIVERY PERSONNEL

IMPORTANT:

All 15,000 - 100,000 Litre tanks sold in Manitoba and Ontario must have an Overfill Shutoff Valve installed (Part #70021) prior to be put in service and filled with fuel.

1. The fuel delivery personnel shall ensure that all applicable Federal, Provincial and Local Codes are met during the filling of the tank.
2. The fuel delivery personnel shall be familiar with, and trained on, proper above ground tank filling procedures.
3. The fuel delivery personnel responsible for transferring product to an above ground tank shall take all reasonable steps to prevent spillage.
4. The fuel delivery personnel shall remain in constant view of the transfer nozzle and fill pipe and shall be in constant attendance at the discharge control valve when the tank is being filled.

4.4 TOP FILL FUEL TRANSFER

WARNING

DO NOT dispense fuel when transfer is in process

1. Have a pre-transfer meeting with the delivery vehicle operator, to determine the correct product is being transferred into the correct tank.
2. Inspect the tank and transfer hose:
 - Check that the vents are unobstructed.
 - Check the transfer hose for leaks, cracks or damage. If leaks are present or later appear, stop transfer, repair as necessary.
3. Lift the Spill Box Cover to expose the 3" male Cam Lock Fill Port and 2" Dip Port.
4. Clean the area before refueling begins.
5. Check the fuel level, through the dip port, to determine the quantity needed.
6. Remove the cotter pins from each side of the 3" Cam Lock that secures the Fill Cap.
 - Lower the retraining latches and pull off the Fill Cap.
7. Attach the transfer hose around the 3" male Cam Lock and hand tighten the connection.

Note:

If the delivery vehicle does not have a matching 3" female Cam Lock, then fill with a nozzle through the 3" fill port.

8. Start delivery vehicle pump and slowly begin fuel transfer.
 - Use the Dip Port to monitor and measure the filling process.
 - Only increase the flow of the product when you are sure there are no problems.

9. DO NOT WALK AWAY DURING TRANSFER.
 - Continuously monitor the transfer of fuel.
 - At all times, keep open communication between delivery vehicle and tank operator.
 - **DO NOT OVERFILL.**

Guidelines:

In summer, fill tank no more than 90% full.
In winter, fill tank no more than 95% full.

10. Reduce fuel transfer rates when nearing the top of the tank to avoid overfilling the tanks.
 - Notify the delivery vehicle operator when the transfer procedure is almost complete.
11. Turn off the delivery vehicle delivery pump.
12. Remove delivery hose.
 - Secure the hose back on the delivery vehicle.
13. Dip tank and record amount of fuel delivered.
14. Close the fill lid and the Dip Port lid.
 - Lock the 3" Cam Lock.
 - Secure with the cotter pins.
15. Close and secure the Spill Box cover.



Fig 19 - Inside the Spill Box on standard tank

4.5 BOTTOM FILL FUEL TRANSFER (OPTIONAL)

WARNING

DO NOT dispense fuel when transfer is in process

There are three options for bottom fill systems:

- Front-side mount
- Rear mount
- Dual bottom fill (for multiple compartment tanks)

Fuel is pumped, under pressure from the delivery vehicle, using the 3" Cam Lock located at the base of the tank, in through the top.

1. Have a pre-transfer meeting with the delivery vehicle operator, to determine the correct product is being transferred into the correct tank.
2. Inspect the tank and transfer hose:
 - Check that the vents are unobstructed.
 - Check the transfer hose for leaks, cracks or damage. If leaks are present or later appear, stop transfer, repair as necessary.
3. Check the fuel level to determine the quantity needed.
 - Use the 2" Dip Port inside the Spill Box.
4. Turn the fill ball valve to the "OFF" position.
5. Wipe the area around the 3" Cam Lock to prevent fuel contamination.
6. Remove the cotter pins from each side of the 3" Cam Lock that secures the Fill Cap.
 - Rotate the retraining latches and pull off the Fill Cap.
7. Attach the transfer hose around the 3" male Cam Lock and hand tighten the connection.
8. Turn the fill ball valve to the "ON" position.
9. Start delivery vehicle pump and slowly begin fuel transfer.
 - Use the Dip Port to monitor and measure the filling process.
 - Only increase the flow of the product when you are sure there are no problems.
10. DO NOT WALK AWAY DURING TRANSFER.
 - Continuously monitor the transfer of fuel.
 - At all times, keep open communication between delivery vehicle and tank operator.
 - **DO NOT OVERFILL.**

Guidelines:

In summer, fill tank no more than 90% full.
In winter, fill tank no more than 95% full.

11. Reduce fuel transfer rates when nearing the top of the tank to avoid overfilling the tanks.
 - Notify the delivery vehicle operator when the transfer procedure is almost complete.
12. Turn off the delivery vehicle delivery pump.
13. Turn the fill ball valve to the "OFF" position.
14. Remove delivery hose.
 - Secure the hose back on the delivery vehicle.
15. Dip tank and record amount of fuel delivered.
16. Close the fill lid.
 - Lock the 3" Cam Lock.
 - Secure with the cotter pins.
17. Close the Dip Port lid.
 - Secure the Spill Box cover.

4.6 MEASURING FUEL LEVEL

DANGER

Never smoke around the fuel tank or expose the tank to direct flame.

Note:

For more accurate results wait 30 - 60 minutes after refueling then dip check the tank. This allows fuel to settle and will give more accurate readings.

1. Remove the dip stick from its storage location at the side of the tank.
 - Wipe off the stick to remove dust and debris, so the tank will not be contaminated.
2. Lift the Spill Box cover.
 - Open the 2" Dip Port lid.
3. Insert the dip stick into the tank until it reaches the bottom.

Note:

Ensure the dip stick is inserted with the lowest number on the dip stick placed toward the bottom of the tank.

4. Take note of the amount of fuel, in centimeters (cm), that is showing on the stick.
5. Close the Dip Port lid.
 - Secure with cotter pin.
6. Close and secure Spill Box cover.
7. Compare the number of centimeters on the dip stick with the Fuel Tank Dip Chart, in this manual, to determine the amount of fuel in the tank. Refer to the charts in Section 7.



Fig 20 - Dip stick location

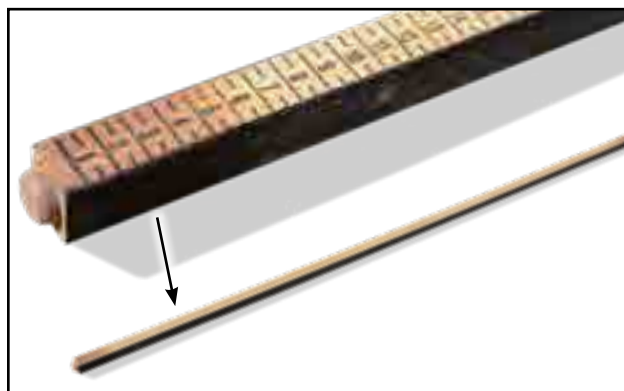


Fig 21 - Dip stick



Fig 22 - Inside Spill Box is the Dip Port

4.7 PUMP OPERATION

WARNING

Always keep the nozzle in contact with the container being filled during the filling process to minimize the possibility of static electricity build up.

There are various options available for the fuel pump and delivery system. Consult the pump manual. It will give specific installation, operation and maintenance information.

4.7.1 Dispensing Fuel (General):

1. Reset Meter to "0" (if applicable).
 - Do not reset meter while dispensing fuel.
2. Remove dispensing nozzle from the boot or drip pot.
3. Inside the control box, switch the lever to the "ON" position to power the pump.
4. Insert nozzle into the container to be filled.
5. Operate the nozzle to dispense fluid.
 - Release nozzle when the desired amount of fluid has been dispensed.
6. Move the lever to the "OFF" position.
7. Remove the dispensing nozzle from the container and store it in the boot or drip pot.

4.7.2 Locking the Pump:

Optional drip pots and chains are available. The chain can be wrapped around the handle and secured with a padlock.

- With the pump turned off, and the nozzle in the stored position, a pad lock can be inserted through the locking link and the nozzle handle opening.



Fig 23 - Pump



Fig 24 - Pump filter and meter



Fig 25 - Nozzle boot



Fig 26 - Fuel pump

Section 5: SERVICE AND MAINTENANCE

WARNING

- Review the Operator's Manual and all safety decals before maintaining the tank.
- Enure all power to the pump is turned off prior to performing any service or maintenance.
- DO NOT smoke when inspecting the tank.
- Keep sparks, flames & hot material away from the fuel tank.
- Installed venting must meet industry standards.

5.1 TANK INSPECTION

NOTICE

CORROSION HAZARD

Microbial corrosion can be caused by water & debris getting into the tank.

Refer to the Petroleum Equipment Institute (PEI), or Steel Tank Institute websites for information on removing water and debris, and preventing corrosion inside the tank.

5.1.1 Daily:

- Check the tank for leaks.
- Inspect the emergency vent(s), including the seal area, for dust, debris, snow, or ice. Remove any obstruction.
- Inspect all vent components for damage, corrosion, or excessive wear. If any is found, replace the vent.
- Repair any wear or damage to the exterior coating at the time of inspection.

5.1.2 Annually:

- Check the secondary containment and internal tank for leakage.
- Check pump and meter for proper operation.
- Check the calibration of the meter, if equipped.
- Make sure the anchor bolts are securely attached to the concrete pad.
- Thoroughly clean the tank and pump.

5.2 FUEL METER MAINTENANCE

5.2.1 Calibration:

For accurate measurement and to prevent meter damage, the meter and piping must always be filled with liquid and be free of air.

Typically, fuel meters can be calibrated for either Litres or U.S. gallons. Calibration is normally required before installation, after disassembly, after wear due to normal operation, or when changing from gallons to liters.

1. If equipped, verify whether the meter installed on the tank is factory calibrated for Litres or U.S. gallons.
2. Select a container of known volume; a five gallon container or larger should be used.
3. Fill a container to the known volume.
4. Check the reading on the meter.
 - If the meter is incorrect, adjust the calibration screw to obtain either more or less diesel fuel.
 - Follow the OEM instructions for the specific meter being used.
5. Repeat Steps 3 and 4 until the calibration is correct.

5.2.2 Maintenance:

The fuel meter should operate maintenance free. However, certain liquids can dry out while in the meter housing, causing the meter to stop functioning. If this occurs, the meter should be thoroughly cleaned, as per instructions below.

1. Remove the meter from the pump.
2. Pour a flushing fluid into the meter and allow it to penetrate the internal components.
3. If possible, pump the flushing fluid through the meter.
4. If the flushing procedure does not fix the problem, the meter should be repaired by an authorized dealer or replaced.
 - Disassembly of the meter is not recommended.
5. Calibrate the meter following the calibration instructions in this section.

5.2.3 Storage:

If the meter is to be stored for an extended period of time, clean it thoroughly to help protect the meter from internal damage.

Section 6: TROUBLESHOOTING

In this section, is a list of common problems, causes and solutions which may be encounter.

If problems are confronted which are difficult to solve, even after having read through this section, please contact your authorized dealer, distributor or the Meridian Manufacturing Inc. Before you call, please have this Operator's Manual and the unit's serial number ready.

Problem	Possible Cause	Possible Solution
Pump Won't Prime	Suction line problem	Check for leaks in suction line
	Bypass valve open	Remove and inspect valve. Must move freely and be free of debris
	Vanes sticking	Check vanes and slots for nicks, burrs and wear
	Excessive rotor or vane wear	Inspect rotor & vanes for excessive wear or damage. Replace if necessary
	Outlet blocked	Check pump outlet, hose, nozzle & filter for blockage
	Vapor Lock	Reduce vertical and horizontal distance from pump to liquid.
		Remove automatic nozzle
Low Capacity	Excessive dirt in screen	Remove and clean screen
	Suction line problem	Check suction line for leaks or restrictions; it may be too small, too long or not airtight
	Bypass valve sticking	Remove and inspect valve; must move freely & be free of debris
	Vanes sticking	Check vanes and slots for wear
	Excessive rotor or vane wear	Inspect rotor & vanes for excessive wear or damage. Replace if necessary
Low Capacity	Hose or nozzle damage	Replace hose or nozzle
	Plugged filter	Replace filter
	Low fluid level	Fill tank

Problem	Possible Cause	Possible Solution
Pump runs slowly	Incorrect voltage	Check incoming line voltage while pump is running
	Vanes sticking	Inspect vanes and slots for nicks, burrs and wear
	Wiring problem	Check for loose connections
	Motor problem	Return to place of purchase
Motor stalls	Bypass valve sticking	Remove and inspect valve. Must move freely and be free of debris
	Low voltage	Check incoming line voltage while pump is running
	Excessive rotor or vane wear	Check rotor & vanes for excessive wear or damage
	Debris in pump cavity	Clean debris from pump cavity
Motor overheats	Pumping high viscosity fluids	These fluids can only be pumped for short periods of time (less than 30 minutes duty cycle)
	Clogged screen	Remove and clean screen
	Restricted suction pipe	Remove and clean pipe
	Motor failure	Return to place of purchase
	Pump rotor lock-up	Clean and check pump rotor and vanes
Motor Inoperative	No power	Check incoming power
	Switch failure	Return to place of purchase
	Motor failure	Return to place of purchase
	Thermal protector failure	Return to place of purchase
	Incorrect/loose wiring	Check wiring
Fluid Leakage	Bad O-ring gasket	Check all O-ring gaskets
	Dirty Shaft Seal	Clean seal & seal cavity
	Bad Shaft Seal	Replace seal
	Incompatible Fluid	Refer wetted parts list to fluid manufacturer
	Loose fasteners	Tighten fasteners
Pump hums but will not operate	Dirt in Pump cavity	Clean out pump cavity
	Motor failure	Return to place of purchase
	Broken Key	Remove all debris & replace key

Section 7: REFERENCE

For information not included here, or for a digital copy of this manual, please call your dealer, or Meridian Manufacturing Inc. directly for assistance. Visit our website at: www.meridianmfg.com

Specifications and measurements are subject to change without notice.

10,000 LITRE FUEL TANK DIP CHART

Primary Tank = 63" I.D. x 208.5" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	9	28	1251	55	3239	82	5491	109	7724	136	9644
2	25	29	1316	56	3320	83	5576	110	7802	137	9704
3	46	30	1381	57	3401	84	5660	111	7881	138	9763
4	71	31	1448	58	3482	85	5745	112	7958	139	9820
5	99	32	1515	59	3564	86	5830	113	8036	140	9877
6	130	33	1584	60	3646	87	5914	114	8113	141	9933
7	163	34	1652	61	3728	88	5998	115	8189	142	9987
8	199	35	1722	62	3810	89	6083	116	8265	143	10040
9	237	36	1792	63	3893	90	6167	117	8341	144	10091
10	277	37	1864	64	3976	91	6251	118	8415	145	10141
11	319	38	1935	65	4059	92	6334	119	8490	146	10190
12	363	39	2008	66	4142	93	6418	120	8563	147	10237
13	408	40	2081	67	4226	94	6502	121	8636	148	10283
14	455	41	2154	68	4309	95	6585	122	8709	149	10327
15	504	42	2229	69	4393	96	6668	123	8781	150	10369
16	554	43	2303	70	4477	97	6751	124	8852	151	10409
17	605	44	2379	71	4561	98	6834	125	8922	152	10447
18	658	45	2455	72	4645	99	6916	126	8992	153	10483
19	712	46	2531	73	4730	100	6998	127	9061	154	10516
20	768	47	2608	74	4814	101	7080	128	9129	155	10547
21	824	48	2685	75	4899	102	7162	129	9196	156	10575
22	882	49	2763	76	4983	103	7243	130	9263	157	10600
23	941	50	2842	77	5068	104	7324	131	9329	158	10621
24	1001	51	2920	78	5152	105	7405	132	9394	159	10638
25	1062	52	2999	79	5237	106	7485	133	9458		
26	1124	53	3079	80	5322	107	7565	134	9521		
27	1187	54	3159	81	5407	108	7644	135	9583		

15,000 LITRE FUEL TANK DIP CHART

Primary Tank = 88-3/4" I.D. x 146-7/8" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	7	40	1782	79	4642	118	7872	157	11047	196	13716
2	21	41	1846	80	4723	119	7956	158	11124	197	13772
3	39	42	1911	81	4803	120	8040	159	11201	198	13827
4	59	43	1977	82	4884	121	8124	160	11277	199	13882
5	83	44	2043	83	4965	122	8207	161	11353	200	13935
6	109	45	2110	84	5046	123	8291	162	11429	201	13988
7	137	46	2177	85	5127	124	8374	163	11504	202	14039
8	167	47	2245	86	5208	125	8458	164	11579	203	14090
9	199	48	2313	87	5290	126	8541	165	11654	204	14140
10	233	49	2382	88	5372	127	8625	166	11728	205	14189
11	268	50	2452	89	5454	128	8708	167	11802	206	14236
12	305	51	2522	90	5536	129	8791	168	11875	207	14283
13	343	52	2592	91	5618	130	8874	169	11948	208	14328
14	383	53	2663	92	5700	131	8957	170	12020	209	14372
15	424	54	2735	93	5783	132	9039	171	12092	210	14415
16	467	55	2806	94	5866	133	9122	172	12164	211	14457
17	510	56	2879	95	5949	134	9204	173	12235	212	14498
18	555	57	2952	96	6031	135	9287	174	12306	213	14537
19	601	58	3025	97	6114	136	9369	175	12376	214	14574
20	649	59	3098	98	6198	137	9451	176	12446	215	14610
21	697	60	3172	99	6281	138	9533	177	12515	216	14645
22	746	61	3247	100	6364	139	9615	178	12584	217	14677
23	796	62	3321	101	6448	140	9696	179	12652	218	14708
24	848	63	3396	102	6531	141	9777	180	12719	219	14737
25	900	64	3472	103	6615	142	9859	181	12786	220	14764
26	953	65	3548	104	6698	143	9939	182	12853	221	14789
27	1007	66	3624	105	6782	144	10020	183	12919	222	14810
28	1062	67	3701	106	6866	145	10101	184	12984	223	14829
29	1118	68	3777	107	6950	146	10181	185	13049	224	14845
30	1174	69	3855	108	7033	147	10261	186	13113	225	14855
31	1232	70	3932	109	7117	148	10341	187	13176		
32	1290	71	4010	110	7201	149	10420	188	13239		
33	1349	72	4088	111	7285	150	10500	189	13301		
34	1409	73	4166	112	7369	151	10579	190	13363		
35	1469	74	4245	113	7453	152	10658	191	13423		
36	1530	75	4324	114	7537	153	10736	192	13483		
37	1592	76	4403	115	7621	154	10814	193	13543		
38	1655	77	4483	116	7705	155	10892	194	13601		
39	1718	78	4562	117	7788	156	10970	195	13659		

25,000 LITRE FUEL TANK DIP CHART

Primary Tank = 88-3/4" I.D. x 246-7/8" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	13	40	2997	79	7809	118	13243	157	18583	196	23072
2	35	41	3105	80	7944	119	13384	158	18713	197	23167
3	65	42	3215	81	8080	120	13524	159	18842	198	23260
4	100	43	3325	82	8215	121	13665	160	18970	199	23351
5	139	44	3436	83	8351	122	13806	161	19098	200	23441
6	183	45	3549	84	8488	123	13947	162	19225	201	23530
7	230	46	3662	85	8624	124	14087	163	19352	202	23617
8	281	47	3776	86	8761	125	14228	164	19478	203	23702
9	334	48	3892	87	8898	126	14368	165	19603	204	23786
10	391	49	4008	88	9036	127	14508	166	19728	205	23868
11	451	50	4124	89	9174	128	14648	167	19852	206	23948
12	513	51	4242	90	9312	129	14788	168	19976	207	24026
13	577	52	4361	91	9450	130	14927	169	20098	208	24102
14	644	53	4480	92	9589	131	15067	170	20220	209	24177
15	714	54	4600	93	9728	132	15206	171	20341	210	24249
16	785	55	4721	94	9867	133	15345	172	20462	211	24319
17	859	56	4843	95	10006	134	15483	173	20582	212	24387
18	934	57	4965	96	10146	135	15622	174	20700	213	24453
19	1012	58	5088	97	10286	136	15760	175	20818	214	24516
20	1091	59	5212	98	10425	137	15898	176	20936	215	24577
21	1172	60	5336	99	10565	138	16036	177	21052	216	24635
22	1255	61	5461	100	10706	139	16173	178	21168	217	24690
23	1340	62	5587	101	10846	140	16310	179	21282	218	24742
24	1426	63	5713	102	10986	141	16447	180	21396	219	24790
25	1514	64	5840	103	11127	142	16584	181	21509	220	24836
26	1603	65	5968	104	11268	143	16720	182	21621	221	24877
27	1694	66	6096	105	11409	144	16856	183	21731	222	24914
28	1787	67	6225	106	11549	145	16991	184	21841	223	24946
29	1880	68	6354	107	11690	146	17126	185	21950	224	24972
30	1976	69	6484	108	11831	147	17261	186	22058	225	24989
31	2072	70	6615	109	11972	148	17395	187	22165		
32	2170	71	6745	110	12114	149	17529	188	22270		
33	2269	72	6877	111	12255	150	17662	189	22375		
34	2370	73	7009	112	12396	151	17795	190	22478		
35	2471	74	7141	113	12537	152	17928	191	22580		
36	2574	75	7274	114	12678	153	18060	192	22681		
37	2678	76	7407	115	12819	154	18192	193	22781		
38	2783	77	7541	116	12960	155	18323	194	22879		
39	2889	78	7675	117	13102	156	18453	195	22976		

35,000 LITRE FUEL TANK DIP CHART

Primary Tank = 88-3/4" I.D. x 348-3/4" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	18	40	4204	79	10954	118	18575	157	26066	196	32362
2	50	41	4356	80	11143	119	18772	158	26248	197	32495
3	91	42	4509	81	11333	120	18970	159	26429	198	32625
4	140	43	4664	82	11523	121	19168	160	26609	199	32754
5	195	44	4820	83	11714	122	19365	161	26788	200	32880
6	256	45	4978	84	11905	123	19562	162	26967	201	33004
7	323	46	5137	85	12097	124	19759	163	27144	202	33126
8	394	47	5297	86	12289	125	19956	164	27321	203	33246
9	469	48	5458	87	12481	126	20153	165	27497	204	33363
10	549	49	5621	88	12674	127	20350	166	27672	205	33478
11	632	50	5785	89	12868	128	20546	167	27846	206	33590
12	719	51	5950	90	13062	129	20742	168	28019	207	33700
13	810	52	6117	91	13256	130	20938	169	28191	208	33807
14	904	53	6284	92	13450	131	21133	170	28362	209	33912
15	1001	54	6452	93	13645	132	21328	171	28532	210	34013
16	1101	55	6622	94	13840	133	21523	172	28701	211	34112
17	1204	56	6793	95	14036	134	21718	173	28869	212	34207
18	1310	57	6964	96	14231	135	21912	174	29036	213	34299
19	1419	58	7137	97	14427	136	22106	175	29201	214	34388
20	1530	59	7310	98	14623	137	22300	176	29366	215	34473
21	1644	60	7485	99	14820	138	22493	177	29529	216	34554
22	1760	61	7660	100	15016	139	22686	178	29691	217	34631
23	1879	62	7837	101	15213	140	22878	179	29852	218	34704
24	2000	63	8014	102	15410	141	23070	180	30011	219	34772
25	2123	64	8192	103	15607	142	23261	181	30169	220	34836
26	2249	65	8371	104	15805	143	23452	182	30326	221	34894
27	2376	66	8551	105	16002	144	23643	183	30482	222	34945
28	2506	67	8732	106	16200	145	23833	184	30636	223	34990
29	2638	68	8913	107	16398	146	24022	185	30788	224	35026
30	2771	69	9095	108	16595	147	24211	186	30940	225	35051
31	2907	70	9278	109	16793	148	24399	187	31089		
32	3044	71	9462	110	16991	149	24587	188	31237		
33	3183	72	9646	111	17189	150	24774	189	31384		
34	3324	73	9831	112	17387	151	24961	190	31529		
35	3466	74	10016	113	17585	152	25147	191	31672		
36	3611	75	10203	114	17783	153	25332	192	31814		
37	3756	76	10390	115	17981	154	25517	193	31954		
38	3904	77	10577	116	18179	155	25700	194	32092		
39	4053	78	10765	117	18377	156	25884	195	32228		

50,000 LITRE FUEL TANK DIP CHART

Primary Tank = 118" I.D. x 279" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	16	44	4553	87	12037	130	20771	173	29866	216	38546	259	45901
2	46	45	4704	88	12230	131	20982	174	30076	217	38736	260	46046
3	85	46	4856	89	12423	132	21192	175	30285	218	38926	261	46189
4	130	47	5009	90	12617	133	21403	176	30494	219	39115	262	46332
5	182	48	5164	91	12812	134	21614	177	30703	220	39303	263	46472
6	239	49	5321	92	13008	135	21825	178	30912	221	39490	264	46611
7	300	50	5478	93	13204	136	22036	179	31120	222	39677	265	46748
8	367	51	5637	94	13400	137	22248	180	31328	223	39863	266	46883
9	437	52	5797	95	13597	138	22459	181	31536	224	40048	267	47017
10	511	53	5958	96	13795	139	22671	182	31744	225	40232	268	47149
11	589	54	6121	97	13993	140	22883	183	31951	226	40415	269	47279
12	671	55	6285	98	14192	141	23094	184	32158	227	40598	270	47408
13	756	56	6449	99	14392	142	23306	185	32364	228	40780	271	47534
14	844	57	6615	100	14591	143	23518	186	32570	229	40960	272	47659
15	935	58	6782	101	14792	144	23730	187	32776	230	41140	273	47781
16	1029	59	6951	102	14993	145	23942	188	32982	231	41320	274	47902
17	1125	60	7120	103	15194	146	24155	189	33187	232	41498	275	48020
18	1225	61	7290	104	15396	147	24367	190	33392	233	41675	276	48137
19	1327	62	7461	105	15598	148	24579	191	33596	234	41851	277	48251
20	1432	63	7634	106	15801	149	24791	192	33800	235	42027	278	48363
21	1539	64	7807	107	16004	150	25003	193	34004	236	42201	279	48472
22	1648	65	7982	108	16207	151	25216	194	34207	237	42375	280	48579
23	1760	66	8157	109	16411	152	25428	195	34409	238	42547	281	48684
24	1874	67	8333	110	16616	153	25640	196	34612	239	42718	282	48786
25	1990	68	8511	111	16820	154	25852	197	34813	240	42889	283	48886
26	2109	69	8689	112	17025	155	26065	198	35015	241	43058	284	48983
27	2229	70	8868	113	17231	156	26277	199	35216	242	43226	285	49077
28	2352	71	9048	114	17437	157	26489	200	35416	243	43393	286	49168
29	2476	72	9229	115	17643	158	26701	201	35616	244	43559	287	49256
30	2603	73	9410	116	17850	159	26913	202	35815	245	43724	288	49341
31	2731	74	9593	117	18056	160	27124	203	36014	246	43888	289	49423
32	2861	75	9776	118	18264	161	27336	204	36212	247	44051	290	49501
33	2993	76	9960	119	18471	162	27548	205	36410	248	44212	291	49575
34	3127	77	10145	120	18679	163	27759	206	36607	249	44372	292	49646
35	3262	78	10331	121	18887	164	27971	207	36804	250	44531	293	49712
36	3399	79	10518	122	19095	165	28182	208	37000	251	44688	294	49774
37	3538	80	10705	123	19304	166	28393	209	37195	252	44845	295	49831
38	3678	81	10893	124	19513	167	28604	210	37390	253	45000	296	49883
39	3820	82	11082	125	19722	168	28815	211	37585	254	45153	297	49929
40	3964	83	11272	126	19932	169	29025	212	37778	255	45306	298	49968
41	4109	84	11462	127	20141	170	29236	213	37971	256	45457	299	49998
42	4255	85	11653	128	20351	171	29446	214	38163	257	45606	300	50015
43	4403	86	11844	129	20561	172	29656	215	38355	258	45754		

65,000 LITRE FUEL TANK DIP CHART

Primary Tank = 118" I.D. x 363" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	21	44	5926	87	15667	130	27036	173	38874	216	50172	259	59745
2	60	45	6122	88	15918	131	27310	174	39147	217	50420	260	59934
3	110	46	6320	89	16170	132	27584	175	39419	218	50666	261	60121
4	169	47	6520	90	16423	133	27859	176	39692	219	50912	262	60306
5	237	48	6722	91	16677	134	28133	177	39964	220	51157	263	60489
6	311	49	6925	92	16931	135	28408	178	40235	221	51401	264	60669
7	391	50	7131	93	17186	136	28683	179	40506	222	51644	265	60848
8	477	51	7337	94	17442	137	28958	180	40777	223	51886	266	61024
9	569	52	7546	95	17699	138	29233	181	41048	224	52127	267	61198
10	666	53	7755	96	17956	139	29509	182	41318	225	52366	268	61370
11	767	54	7967	97	18214	140	29784	183	41588	226	52605	269	61540
12	873	55	8180	98	18473	141	30060	184	41857	227	52843	270	61707
13	984	56	8395	99	18732	142	30336	185	42126	228	53079	271	61871
14	1098	57	8611	100	18992	143	30612	186	42394	229	53315	272	62033
15	1217	58	8828	101	19253	144	30888	187	42662	230	53549	273	62193
16	1339	59	9047	102	19515	145	31164	188	42930	231	53782	274	62350
17	1465	60	9267	103	19777	146	31440	189	43197	232	54014	275	62504
18	1594	61	9489	104	20039	147	31716	190	43463	233	54245	276	62655
19	1727	62	9712	105	20303	148	31992	191	43729	234	54474	277	62804
20	1864	63	9936	106	20566	149	32269	192	43995	235	54703	278	62949
21	2003	64	10162	107	20831	150	32545	193	44260	236	54930	279	63092
22	2145	65	10389	108	21096	151	32821	194	44524	237	55155	280	63232
23	2291	66	10617	109	21361	152	33097	195	44788	238	55380	281	63368
24	2439	67	10847	110	21627	153	33374	196	45051	239	55603	282	63501
25	2591	68	11077	111	21894	154	33650	197	45314	240	55825	283	63631
26	2745	69	11309	112	22161	155	33926	198	45576	241	56045	284	63757
27	2902	70	11542	113	22428	156	34202	199	45837	242	56264	285	63879
28	3061	71	11777	114	22696	157	34478	200	46098	243	56482	286	63998
29	3223	72	12012	115	22964	158	34754	201	46358	244	56698	287	64112
30	3387	73	12249	116	23233	159	35030	202	46618	245	56912	288	64223
31	3554	74	12486	117	23503	160	35306	203	46876	246	57125	289	64329
32	3724	75	12725	118	23772	161	35581	204	47135	247	57337	290	64431
33	3895	76	12965	119	24042	162	35857	205	47392	248	57547	291	64528
34	4070	77	13206	120	24313	163	36132	206	47649	249	57755	292	64620
35	4246	78	13447	121	24584	164	36407	207	47905	250	57962	293	64706
36	4424	79	13690	122	24855	165	36682	208	48160	251	58167	294	64787
37	4605	80	13934	123	25126	166	36957	209	48414	252	58371	295	64861
38	4788	81	14179	124	25398	167	37231	210	48668	253	58572	296	64928
39	4972	82	14425	125	25671	168	37506	211	48921	254	58772	297	64988
40	5159	83	14671	126	25943	169	37780	212	49173	255	58971	298	65039
41	5348	84	14919	127	26216	170	38054	213	49424	256	59167	299	65078
42	5539	85	15167	128	26489	171	38327	214	49674	257	59362	300	65100
43	5731	86	15417	129	26763	172	38601	215	49923	258	59554		

75,000 LITRE FUEL TANK DIP CHART

Primary Tank = 118" I.D. x 423" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	25	44	6907	87	18260	130	31511	173	45308	216	58476	259	69634
2	70	45	7136	88	18553	131	31830	174	45626	217	58765	260	69854
3	128	46	7367	89	18847	132	32150	175	45944	218	59053	261	70072
4	197	47	7600	90	19141	133	32470	176	46261	219	59339	262	70287
5	276	48	7835	91	19437	134	32790	177	46578	220	59624	263	70501
6	362	49	8072	92	19733	135	33110	178	46895	221	59909	264	70711
7	456	50	8311	93	20031	136	33430	179	47211	222	60192	265	70919
8	556	51	8552	94	20329	137	33751	180	47527	223	60474	266	71125
9	663	52	8794	95	20628	138	34072	181	47842	224	60754	267	71328
10	776	53	9039	96	20928	139	34393	182	48157	225	61034	268	71528
11	894	54	9286	97	21229	140	34714	183	48471	226	61312	269	71725
12	1018	55	9534	98	21530	141	35036	184	48785	227	61589	270	71920
13	1147	56	9784	99	21833	142	35357	185	49098	228	61865	271	72112
14	1280	57	10036	100	22136	143	35679	186	49411	229	62139	272	72301
15	1418	58	10289	101	22440	144	36000	187	49723	230	62412	273	72487
16	1561	59	10544	102	22745	145	36322	188	50035	231	62684	274	72670
17	1707	60	10801	103	23050	146	36644	189	50346	232	62954	275	72849
18	1858	61	11059	104	23356	147	36966	190	50657	233	63223	276	73026
19	2013	62	11319	105	23663	148	37288	191	50967	234	63491	277	73199
20	2172	63	11581	106	23970	149	37610	192	51277	235	63757	278	73369
21	2334	64	11844	107	24279	150	37932	193	51585	236	64022	279	73535
22	2501	65	12109	108	24587	151	38254	194	51893	237	64285	280	73697
23	2670	66	12375	109	24897	152	38576	195	52201	238	64546	281	73856
24	2843	67	12642	110	25207	153	38898	196	52508	239	64806	282	74011
25	3019	68	12911	111	25517	154	39219	197	52814	240	65065	283	74162
26	3199	69	13181	112	25829	155	39541	198	53119	241	65322	284	74309
27	3382	70	13453	113	26140	156	39863	199	53424	242	65577	285	74452
28	3568	71	13726	114	26453	157	40185	200	53728	243	65830	286	74590
29	3756	72	14000	115	26765	158	40506	201	54031	244	66082	287	74724
30	3948	73	14276	116	27079	159	40828	202	54334	245	66332	288	74853
31	4143	74	14553	117	27393	160	41149	203	54635	246	66581	289	74977
32	4340	75	14831	118	27707	161	41470	204	54936	247	66827	290	75095
33	4540	76	15111	119	28022	162	41791	205	55236	248	67072	291	75208
34	4743	77	15391	120	28337	163	42112	206	55535	249	67315	292	75315
35	4949	78	15673	121	28653	164	42433	207	55834	250	67556	293	75416
36	5156	79	15956	122	28969	165	42753	208	56131	251	67795	294	75510
37	5367	80	16240	123	29285	166	43074	209	56428	252	68032	295	75597
38	5580	81	16526	124	29602	167	43394	210	56723	253	68267	296	75675
39	5795	82	16812	125	29920	168	43714	211	57018	254	68500	297	75745
40	6013	83	17100	126	30237	169	44033	212	57312	255	68731	298	75804
41	6233	84	17388	127	30555	170	44352	213	57604	256	68960	299	75849
42	6455	85	17678	128	30874	171	44671	214	57896	257	69187	300	75875
43	6680	86	17969	129	31192	172	44990	215	58187	258	69412		

100,000 LITRE FUEL TANK DIP CHART

Primary Tank = 125" I.D. x 495" Long

DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)	DEPTH (CM)	VOLUME (LITRE)
1	30	48	9470	95	25024	142	43096	189	61772	236	79342	283	93689
2	84	49	9757	96	25390	143	43493	190	62163	237	79690	284	93936
3	155	50	10047	97	25757	144	43891	191	62554	238	80037	285	94179
4	238	51	10339	98	26126	145	44288	192	62945	239	80382	286	94420
5	332	52	10633	99	26495	146	44686	193	63335	240	80726	287	94657
6	436	53	10930	100	26865	147	45084	194	63725	241	81068	288	94890
7	550	54	11228	101	27237	148	45482	195	64114	242	81408	289	95120
8	671	55	11529	102	27609	149	45881	196	64502	243	81748	290	95346
9	800	56	11833	103	27982	150	46279	197	64890	244	82085	291	95569
10	936	57	12138	104	28357	151	46678	198	65277	245	82421	292	95788
11	1078	58	12445	105	28732	152	47076	199	65663	246	82755	293	96003
12	1227	59	12755	106	29108	153	47475	200	66049	247	83088	294	96214
13	1383	60	13066	107	29485	154	47874	201	66434	248	83419	295	96421
14	1544	61	13380	108	29862	155	48273	202	66818	249	83748	296	96624
15	1710	62	13696	109	30241	156	48672	203	67202	250	84076	297	96822
16	1882	63	14013	110	30621	157	49072	204	67585	251	84401	298	97016
17	2060	64	14332	111	31001	158	49471	205	67967	252	84725	299	97205
18	2242	65	14654	112	31382	159	49870	206	68349	253	85048	300	97390
19	2429	66	14977	113	31764	160	50269	207	68730	254	85368	301	97570
20	2621	67	15301	114	32146	161	50668	208	69109	255	85686	302	97744
21	2817	68	15628	115	32530	162	51067	209	69489	256	86003	303	97914
22	3017	69	15956	116	32914	163	51466	210	69867	257	86317	304	98078
23	3222	70	16287	117	33299	164	51865	211	70244	258	86630	305	98236
24	3431	71	16618	118	33684	165	52264	212	70621	259	86940	306	98388
25	3644	72	16952	119	34070	166	52663	213	70996	260	87249	307	98534
26	3861	73	17287	120	34457	167	53062	214	71371	261	87555	308	98674
27	4082	74	17624	121	34844	168	53460	215	71745	262	87859	309	98806
28	4307	75	17962	122	35232	169	53859	216	72117	263	88162	310	98931
29	4535	76	18302	123	35621	170	54257	217	72489	264	88462	311	99048
30	4767	77	18643	124	36010	171	54655	218	72860	265	88759	312	99157
31	5002	78	18986	125	36400	172	55053	219	73230	266	89055	313	99256
32	5240	79	19331	126	36790	173	55451	220	73599	267	89348	314	99345
33	5482	80	19677	127	37181	174	55848	221	73967	268	89639	315	99422
34	5728	81	20024	128	37573	175	56245	222	74333	269	89927	316	99485
35	5976	82	20373	129	37964	176	56642	223	74699	270	90213	317	99530
36	6228	83	20723	130	38357	177	57039	224	75063	271	90497		
37	6482	84	21074	131	38750	178	57435	225	75427	272	90778		
38	6740	85	21427	132	39143	179	57831	226	75789	273	91056		
39	7001	86	21781	133	39537	180	58227	227	76150	274	91332		
40	7264	87	22137	134	39931	181	58623	228	76510	275	91605		
41	7530	88	22493	135	40325	182	59018	229	76868	276	91876		
42	7800	89	22851	136	40720	183	59412	230	77225	277	92143		
43	8071	90	23210	137	41115	184	59807	231	77582	278	92408		
44	8346	91	23571	138	41511	185	60201	232	77936	279	92670		
45	8623	92	23932	139	41907	186	60594	233	78290	280	92929		
46	8903	93	24295	140	42303	187	60987	234	78642	281	93186		
47	9185	94	24659	141	42700	188	61380	235	78993	282	93439		

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LIMITED WARRANTY STATEMENT

Meridian Manufacturing Inc., (hereinafter referred to as Meridian) hereby warrants the tank(s) sold by it to be free from any defect in material or workmanship under normal use and service for a period of two (2) years from the date of shipment. Meridian also warrants the structural integrity of the tanks(s) for a period of ten (10) years from the date of shipment. Meridian's obligation under this warranty shall be limited to the repair or replacement only, FOB the original point of shipment, of any defective parts or portions of the tank or accessories manufactured by Meridian. Any warranty claim must be reported to the Meridian within two (2) years for general and coating claims or ten (10) years for structural claims, from the date of shipment and in the manner as referred to in paragraph 2 herein.

THIS WARRANTY IS SUBJECT TO THE FOLLOWING LIMITATIONS, PROVISIONS AND CONDITIONS:

1. This warranty does not apply to:
 - d. Any product sold by Meridian where it is used in areas exposed to corrosive or aggressive conditions including salt water, acids, alkaloid, ash, cement dust, animal waste or other corrosive chemicals.
 - e. Failures or defects arising out of damage during shipment or during storage on site.
 - f. Materials replaced or repaired under this warranty except to the extent of the remainder of the applicable warranty.
 - g. Damage resulting from misuse, negligence, accident or improper site preparation by others.
 - h. Products that have been altered or modified by others.
 - i. (in the case of coating failures) failure as the result of damage, lack of proper maintenance or failure to remove road salt or other contaminants that may have come in contact with the tank surface.
 - j. Products that have not been installed strictly in accordance with the Meridian's manuals and instructions.
2. The obligation of Meridian under this warranty shall not arise unless the Meridian is notified and this warranty is presented together with a written statement specifying the claim or defect within thirty (30) days after the failure is first detected or made known to the owner and within two (2) years for general and coating claims and ten (10) years for structural claims, from the shipment date. Meridian in its sole discretion shall determine if the claim is valid and whether correction of the defect or failure shall be made by repair or replacement of the materials.
3. The coating warranty is based on the Manufacturer's performance specification for polyester powder finishes and does not include repair of minor blemishes or rusting that is normally part of the general maintenance of the tank.
4. The obligation of Meridian hereunder extends only to the original owner and to the Meridian dealer to whom the materials may have been initially sold. This warranty shall not be subject to any assignment or transfer without the written consent of Meridian.
5. The customer shall acknowledge that it has made its own independent decision to approve the use of the supplied materials and also the specific fabrication and construction procedures utilized to complete the tank, and has satisfied itself as to the suitability of these products for this particular application.

6. The foregoing sets forth the only warranties applicable to said materials and said warranties are given expressly and in lieu of all other warranties, expressed or implied, statutory or otherwise, of merchantability or fitness for a particular purpose and all warranties which exceed or differ from said warranties herein are disclaimed by the Manufacturer.
7. The owners sole and exclusive remedy against Meridian shall be limited to the applicable warranty set forth herein and the endorsements, if any, issued together with this document and no other remedy (including but not limited to the recovery of assembly or disassembly costs, shipping costs, direct, incidental, special, indirect or consequential damages for lost profits, lost sales, injury to person or property or any other loss, whether arising from breach of contract, breach of warranty, tort, including negligence, strict liability or otherwise) shall be available to the owner or Meridian Dealer or any other person or entitles whether by direct action or for contribution or indemnity or otherwise.
8. The financial obligation of Meridian under this warranty shall be limited to the repair or replacement of the product as originally supplied and in no event shall exceed the original cost of the product supplied.
9. Meridian shall not have any obligation under any warranty herein until all accounts for materials, installation and erection of the said product thereof and for labor and other work performed by Meridian or its dealers have been paid in full by the owner.

Register your product at: www.meridianmfg.com
For warranty information send an email to: warranty@meridianmfg.com

WARRANTY REQUEST PROCEDURE

1. The product must be registered with Meridian Manufacturing Inc.
2. The purchaser must contact the dealer, from where the unit was purchased, immediately upon discovery of any defects.
3. A completed Warranty Request Form must be submitted by the dealer to Meridian's warranty representative for review and any subsequent course of action.
 - Warranty requests must be completed with ALL required information in order for it to be considered for approval.
 - Send photographs of the entire piece of equipment, and of the specific area of concern.
4. Warranty repair work will only be performed by Meridian or an approved representative of Meridian. Warranty work completed prior to Meridian's approval will NOT be honoured. Failure to follow this procedure may affect any or all of this warranty.
5. All warranty requests will be adjudicated at the sole discretion of Meridian and in accordance with the terms and conditions of the warranty.



Camrose, AB (800) 830-2467
Lethbridge, AB: (800) 661-1436
Winkler, MB: (800) 665-7259
www.meridianmfg.com | fuel tanks@meridianmfg.com