



CUBE DEF TANK

396 Gallon

Pulse Meter



User Manual and Instructions

Rev 6/30/2020



I. Opening and Closing the Cube

To fill the Cube with product and to access pumping equipment, you will need to open the blue poly lid. There are two (2) T handle access latches which secure the lid. To open the lid, you will need to:

Photo A – Depress the button on the access latch.

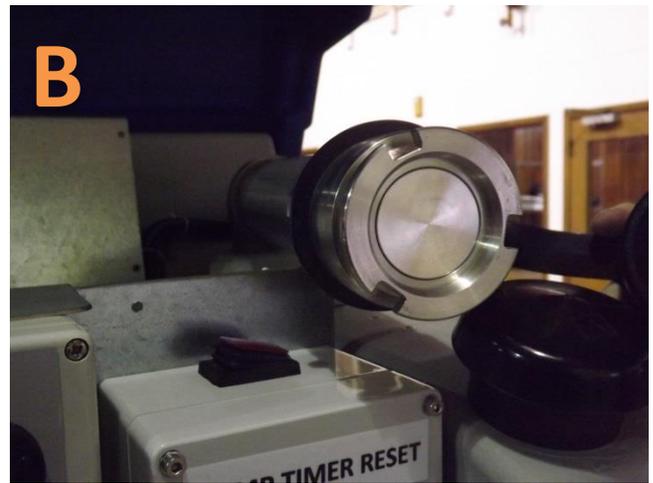
Photo B – Raise the buckle which will release tension on the T handle access latch.

Photo C – Grasp T handle and lower latch 180 degrees. (Repeat process for latch on opposite side.)

Photo D – With your free hand, slowly let the lid rise. The lid is equipped with two gas spring arms which will control the speed at which the lid will open and, once fully engaged, hold the lid in place.

Please note that when both latches are released the cover is designed to rise automatically. The cover is considered fully open at approximately 45 degrees. Attempting to open the cover further while the retention arms are fully engaged may result in damage or injury.

Please close and secure the poly lid after each use. Exercise caution to avoid catching hand or fingers beneath the lid.



II. Filling the Cube

The Cube is rated to hold approximately 396 gallons of Diesel Exhaust Fluid (DEF). The Cube is for use with DEF only and should only be filled by authorized personnel.

To fill the Cube, delivery personnel will be required to:

Photo A – Remove the 2” protective rubber cap.

Photo B – Connect a 2” Male Dry Coupler (not provided) to the Cube’s 2” BSP Female Dry Coupler.

With the couplers fully engaged, the Cube is now ready to be filled.

After the Cube is filled to the desired level, the couplers are disengaged. It is recommended that the female coupler be wiped down and the 2” protective rubber cap be replaced after each fill.



III. Audio Overfill Alarm System

The audio overfill alarm system is designed to notify personnel filling the Cube when the unit has reached approximately 85% of its fill capacity. It is designed to operate on 110V of power. The green light indicates that the unit is powered and operational.



Photo A – When the Cube reaches a level of approximately 85% full, the red alarm light and the yellow caution light on the system display will be illuminated accompanied by an audible warning. This audible alarm is designed to notify the filler that the tank is nearly full.



Photo B – To silence the alarm, press the acknowledge button once.



Photo C – Once the alarm has been silenced, the red alarm light will remain lit until the Cube is at less than 85% fill capacity.

(III. Continued)



Photo D - The decibel level of the alarm can be adjusted by rotating the shutter. Decibel range for alarm is 77 to 97 dB based on shutter setting.

Photo E – After the alarm has been silenced, the person filling the cube should monitor the fill gauge. Dispensing of DEF should stop when the gauge reaches the 95% full mark.

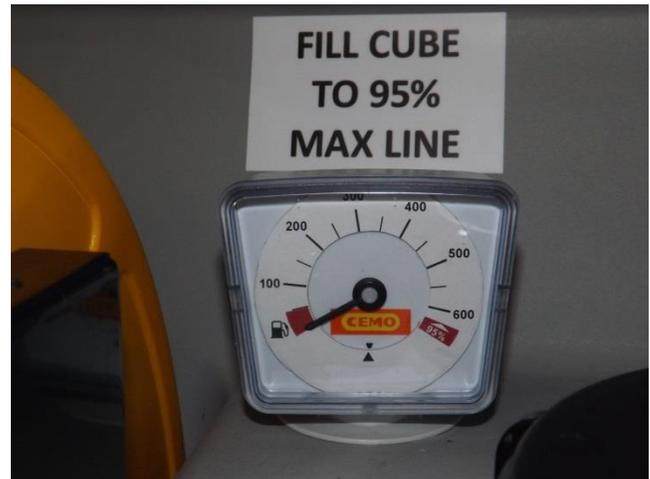


Photo F – To prevent spills, the Cube is constructed with double walls. If a leak within the inner wall were to occur, fluid would be visible in the sight glass. It is recommended that the sight glass be checked on a periodic basis.



IV. Dispensing Product

Your Cube is equipped with a heavy duty oval gear pulse output flow meter designed to work with a wide range of automated fuel management systems.



Photo A – Assure that the toggle switch is in the “ON” position.

Photo B – Once integrated with the automated fuel management system, the TD10-115V ½ HP diaphragm pump will be activated when prompted via keypad entry, fob or card swipe at automated fuel management system interface.



Photo C - The TD10 is equipped with a timer that will automatically shutoff the pump after approximately six minutes of run time, or when a transaction is completed via entry in to the automated fuel management system interface.



Photo D - Insert the stainless steel nozzle in to the DEF tank of the vehicle to be filled. Depress the trigger on the nozzle to begin filling. When filling is complete, release the trigger and return the nozzle to its cradle on top of the Cube.



The dispense hose is connected to an integrated retractable hose reel. Only pull the hose from the reel using the installed ball stop mechanism.



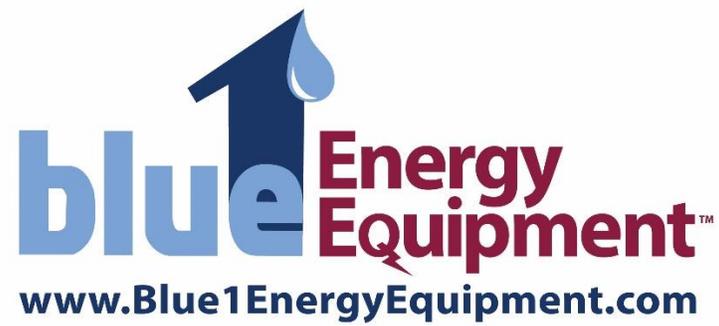
V. Heater

The Cube is equipped with a 250W 120V Heater with fan and thermostat. The unit is designed to come on when temperatures are $\leq 32^{\circ}\text{F}$. To operate properly, the unit requires continuous power. It is on the same electrical circuit, (Circuit #2), as the Audio Overfill Alarm.

To ensure the efficiency of the heater, the poly lid must be closed after each use.

VI. Safety

1. The Cube is a stationary piece of equipment. It is not to be used as a mobile, portable tank.
2. Move the Cube only when it is empty. At a minimum, use two persons and carrying straps to relocate.
3. If transporting the Cube in a truck, use a minimum of two suitable bands to secure it in the vehicle.
4. Exercise caution when opening and closing the lid to avoid injury to body including hands and fingers.



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