

IMPORTANT –SEE POST-SPRAY FLUSH PROCEDURES & ALSO MAINTENANCE PROCEDURES AT END!

SET-UP INSTRUCTIONS FOR DULTMEIER SALES SELF-LOADING ANTI- ICE/DE-ICE/DUST CONTROL SPRAYING SYSTEMS 1,065 AND 1,800 GALLON HYDRAULIC

1. Always ensure the **tank(s) is completely empty** before loading or unloading the system from the dump truck. The frame is not designed to support liquid weight when free-standing.
2. Always **install and tighten the locking pins (bolts) on the front legs when the system is free-standing**. This will help prevent lateral wind forces from tipping or sliding the system, or putting undue stress on the front leg's main bolts.
3. **Important: After the tank(Ss) are filled for the first time, be sure to check all J-bolts which hold the tank(s) to the frame, and re-tighten them as necessary (filling the tank causes settlement which will very likely loosen these bolts).**
4. **To Load/Unload the System:**
 - A. First move & set the telescoping rear legs so that the REAR height from ground to underside of main frame channels is approximately 2-4" less than the dump truck's bed height above the ground. This may take some trial and error to work initially to find the best rear leg height setting for your particular dump truck. At this point, the system will not be level and that is fine; this step is necessary in order to be able to load the system properly.
 - B. Back up the dump truck squarely towards the unit (use spotters) so the front frame guides are inside the bed walls on each side. Once dump bed rear is under the system's front wheels by 2'6" - 3', then rotate the bed up until the system's front wheels contact the dump bed. This will take weight off the system's front legs so that the locking pins can be removed and the legs become free to rotate up (Note: depending upon the dump bed height, the bed's rotation angle may need to be 30-40 degrees during this step to remove weight from the system's front legs). Store front leg lock pins for later use.
 - C. Now, rotate dump bed back down to approximately 10 degrees and drive the truck backwards slowly so that the unit rolls into the dump

bed. Have a spotter on each side watch the front legs rotating back and up towards the system's main side channels and pull the legs out slightly if necessary to avoid legs catching on the side channels.

- D. Stop backing when front-most portion of tank dome is approximately 4" from the closest projection of the bed's front end (this allows some room for tank movement due to liquid sloshing when stopping/starting/bumps, etc.).
- E. Then install 4" square tube and tailgate "latch pins" (included, but shipped separately) along bottom side of system to securely hold system in the dump bed. Weld this square tube to the bottom side of system's main 6" side channels and then weld the latch pins near the end of the channel (each side). The latch pins must be locked into the tailgate's latch pin groove and load binders must also be installed at each rear corner before driving the truck (load binders supplied by owner; these provide extra protection in the event of a latch pin release).
- F. Follow steps A-D in reverse to unload the system.

IMPORTANT: POST-SPRAY RUN FLUSHING PROCEDURES:

- A. First, flush the entire system plumbing and pump thoroughly with water when spraying work is completed to remove salts and other corrosive liquids (after each spray event). Otherwise, in a short period, salts can crystallize into solids causing clogging of valves, nozzles, etc. **(Note: If you are using a non-corrosive liquid, you may skip steps A-C here and simply keep the system fully "charge" with liquid-Oas long as the liquid will not "gum" up or crystallize in cold weather; otherwise, proceed with A-C here after each spray event).**
- B. Second, Drain the entire system plumbing and pump thoroughly to remove all flushing water:
 - 1. Drain the pump; unscrew drain plug at bottom of pump to drain.
 - 2. Remove strainer cap to drain strainer, suction and discharge plumbing (open the "Drain-Fill" Valve, Boom On-Off Valves, valve feeding to hose reel and hose end gun (if you have a hose reel) when doing this to let air in and to be sure all suction and discharge plumbing including the boom itself are fully drained out).
 - 3. Re-install strainer cap and close all valves.

- C. Third, Fill the entire system plumbing and pump thoroughly with either RV anti-freeze or 50% Anti-freeze/ 50% Water to eliminate corrosion and prevent freezing (this last step is very important; without liquid in the pump and plumbing, air will cause corrosion to take place).
- D. Fourth, Flush the truck bed and the skid frame with a low pressure hose to remove corrosive liquids. DO NOT use a high-pressure hose nor spray water directly on the pump engine, electric valves or wire connections during flushing operations.

IMPORTANT: MAINTENANCE INSTRUCTIONS FOR DULTMEIER SALES SELF-LOADING ANTI-ICE/DE-ICE/DUST CONTROL SPRAYING SYTEMS

- 1. Perform pump hydraulic motor (or engine) maintenance in accordance with manufacturer's maintenance instructions (pump manual should be shipped with system; call if additional copies are needed).
- 2. **Check J-bolts holding tank hoops to steel frame periodically and tighten if necessary.**
- 3. Verify the Speed Calibration periodically (at least once every two months and before the start of each season) follow the procedure outlined in the DCS400 (or DCS410) Installation & Service Manual.
- 4. Also verify the Meter Calibration periodically (at least once every two months and before the start of each season) follow the procedure outlined in the DCS400 (or DCS410) Installation & Service Manual.
- 5. Check and clean the strainer screen before each spray run.
- 6. Before the start of each season (or if system is running well and then changes occur), check the flow meter for clogging or crystals-See DCS400 (or DCS410) Installation & Service Manual.