## <u>Air Transfer</u>

- 1. To prevent electrostatic discharge and risk of explosion, only use properly grounded hoses and piping when conveying product.
- Before beginning to unload product, particularly in temperatures below 32° F / 0° C, ensure that the oil has been adequately warmed at idle speed. Cold oil will result in higher start-up pressures and may cause damage to hydraulic components; particularly the hydraulic cooler elements.
- Never leave the controls unattended while unloading! If a problem occurs and the system is allowed to operate at a pressure higher than the relief valve pressure setting for an extended period



of time, severe damage may be done to the hydraulic pump(s) and pressure relief valve(s).

- 4. Position the trailer in close proximity to the storage location of the product that you intend to transfer. The shorter the distance and the straighter that the hoses can be laid out; the more efficient the system will operate.
- 5. Connect a metal jumper hose between the transfer airlock outlet and the header fill pipe.
- 6. Connect the required suction hoses and attachments to the transfer receiver inlet.
- 7. If the unit is fitted with a hydraulic oil bypass ball valve, open this valve to direct excess oil flow directly back to the tank in order to reduce the amount of heat generated in the hydraulic system. Always ensure that the pump PTO is disengaged when shifting the bypass valve. Shifting this valve with the pump running may result in damage to the system.
- 8. If the unit is fitted with an air bypass Y-valve on the suction/blower system, ensure that the switch is in the SUCTION position.
- 9. Engage the hydraulic pump and the blower PTO's.
- 10. Increase the engine speed to the required transferring speed.
- 11. Start the airlock with the manual control handle. Typical airlock speed should be between 55 and 70 RPM.
- 12. Adjust the suction nozzle slide to be open 1".
- 13. Insert the suction nozzle into the product with the inlet below the surface of the product, but ensuring that the suction nozzle slide is not covered.
- 14. It is the Operator's responsibility to monitor the system and to operate the unit within the desired ranges. The suction nozzle slide and airlock speeds should be set in a manner which allows the vacuum in the line to remain relatively stable between 8-12 inHg with minimal pulsation in the lines. If there is too much or not enough vacuum, adjust the suction nozzle slide and the airlock speed to bring the unit back within the target range.

- 15. Monitor the product level in the compartment receiving product. When a compartment is full, open the header valve for the next compartment to be filled and close the header valve above the full compartment.
- 16. When the product transfer is complete, ensure that the receiver tank and all lines are empty before shutting down the system.
- 17. Turn off the airlock with the manual control handles.
- 18. Lower the engine speed to an idle.
- 19. Shut down the pump and blower PTO's.
- 20. Disassemble and properly store all delivery lines and attachments.
- 21. Reinstall all of the plugs.
- 22. Clean out the dust collector at the end of every transferred load.