Klinge Corporation

PTI form for all Trans-Shipment NMR 262-50 and NMG-115 systems

Date:	Container #:	Location:
NMG Serial #:		Hour meter reading:
NMR Serial #:		Date of last PTI (if known):

Note: Manuals can be requested by contacting technical@klingecorp.com
Below Reefer Equipment sections are under assumption that Sure Power is being Supplied.
IF Sure Power is not Being Supplied the Generator Set will eed to be connected to Reefer Equipment and Generator Set Turned On.

	Check if **OK**
Inspect generator set for damage, missing parts and loose mounting bolts.	
Check fuel level. If necessary, add appropriate diesel fuel.	
Inspect fuel sediment bowl and strainer for water contaminates. Drain water from bowl, clean bowl and strainer if necessary.	
Check engine oil level. Add appropriate oil to dipstick mark, if needed.	
Check air filter and air intake hoses are in good condition. Ensure all air system rubber hoses are clamped tightly. Check that the rubber vacuator valve is in good condition and faces down.	
Check fan belt for wear, cracks and proper tension. Tighten or replace if necessary.	
Make sure that the fan is not damaged and that the cooling air circulation is not obstructed.	
Make sure the unit spares part kit security seal is not broken and that the box is secured.	
Observe and record the hour meter reading at the top of the form.	

***** Check unit visually for physical damage:	Check if **OK**
Ensure major hold-down bolts are tightened and main power cable fittings are in good condition.	
Open control box cover and check that all electric components are secured. ***CAUTION**** **THE MAIN POWER IS ON!!**	
Check the gasket on control box covers. Be sure the latches hold the covers tightly closed by confirming an indentation in the gasket from the control box lid.	
Check cleanliness of the condenser coils and steam or air clean if necessary.	
Check all refrigerant joints and connections thoroughly for traces of oil or stains indicating small refrigerant leak.	
Check and record voltage of generator set battery. The reading should be between 10 – 13 volts.	
Start generator set.	
Wait until engine speed stabilizes and oil pressure reaches a minimum of 30 psi.	
Check intake air hose restriction indicator to ensure red indicator is not visible, if so, service air cleaner.	
Turn the generator circuit breaker ON. Check Voltage out put at the generator plug. If Generator supplying the power then check output voltage at Generator main Circuit Breaker.	
Turn both systems and Generator Set OFF. If Generator supplying power keep this ON.	

System 1	**System 1**
On System 1, initiate the function test by holding "Manual Defrost" switch ON while switching its ON/OFF switch to the ON position. All System 1 thermostat LEDs will flash to indicate they work. Turn on System 2.	
Watch the LEDs and follow the side label on the System 1 thermostat as it steps through the test. If it stops at any step there is a fault associated with the item indicated. After the function test ends, System 1 will go into normal operation and indicate it is the “primary system” via the controller LED.	
Wait 5 minutes and then check and record voltage of battery. The reading should be between 13 – 14 volts when on generator power and approximately 12 – 13 volts when on shore/mains power.	
Check the rotation of Condenser fan. See arrow marking correct direction.	
Record incoming main power voltage.	

Record amperage of the compressor motor, the condenser motor and the evaporator motor. Should **not exceed** the following:

Compressor	14 Amps	L_1	L_2	L3	
Condenser Fan	1.5 Amps	L_1	L_2	L3	
Evaporator Fan	0.7 Amps	L_1	L_2	L3	
After 10 -15 minutes of running, put unit on manual defrost by holding the defrost switch on for 5 seconds. The compressor will continue to run, the fans will stop.					
After defrost terminates, the unit will switch over to System 2 running as primary. This is normal operation. Turn OFF both systems and turn them back ON again. Run system 1 for 15 minutes to allow temperature to					

stabilize, then check the receiver sight glasses. The balls in the upper sight glass should be on the bottom of the sight glass, the balls in the lower sight glass should be floating.	
Switch main circuit breaker of System 1 OFF and verify activation of alarm horn and light.	
Verify that alarm condition causes System 2 to take over as the Primary System (as indicated on System 2 controller). NOTE: Changeover from System 1 to System 2 will take a few minutes.	
Turn OFF both systems.	

System 2	**System 2**
On System 2, initiate the function test by holding "Manual Defrost" switch ON while switching its ON/OFF switch to the ON position. All System 2 thermostat LEDs will flash to indicate they work. Do not turn on System 1.	
Watch the LEDs and follow the side label on the System 2 thermostat as it steps through the test. If it stops at any step there is a fault associated with the item indicated. After the function test ends, System 2 will go into normal operation and indicate it is the “primary system” via the controller LED. NOTE: System 2 will also show an A42 alarm indicating that it cannot communicate with System 1. This is normal when only one system is initiated, disregard during this part of the PTI.	
Wait 5 minutes and then check and record voltage of battery. The reading should be between 13 – 14 volts when on generator power and approximately 12 – 13 volts when on shore/mains power.	
Check the rotation of Condenser fan. See arrow marking correct direction.	

Record amperage of the compressor motor, the condenser motor and the evaporator motor. Should **not exceed** the following:

Compressor	11 Amps	L_1	L_2	L3
Condenser Fan	1.5 Amps	L_1	L_2	L3
Evaporator Fan	0.7 Amps	L_1	L_2	L3

After running for 10 -15 minutes put unit on manual defrost by holding the defrost switch on for 5 seconds. The compressor will continue to run, the fans will stop. Immediately turn ON System 1. System 2 will continue to act as the “primary system”.	
After defrost terminates, the unit will switch over to System 1 running as primary. This is normal operation. Turn OFF both systems and turn ON System 2 ONLY. Run system 2 for 15 minutes to allow temperature to stabilize, then check the receiver sight glasses. The balls in the upper sight glass should be on the bottom of the sight glass, the balls in the lower sight glass should be floating.	
Turn on System 1. System 2 will continue to act as the “primary system”.	
Switch main circuit breaker of System 2 OFF and verify activation of alarm horn and light.	
Verify that alarm condition causes System 1 to take over as the Primary System (as indicated on System 1 controller).	
Keep system 1 as primary and system 2 a secondary and allow to run in normal operations.	

Data logger

Press the blue button on the data logger until “Journey Ticket Numerical” is displayed. Attach data logger printout to this PTI form. - If data logger does not print ticket, check for printer paper. Insert new paper roll in printer. - If data logger printout has vertical stripe of color (red or purple), paper roll is close to end. Replace with new paper roll.	
Verify that the alarm function of the data logger is activated if customer has required this.	

Notes:

Signature:	