

MAINTENANCE INSTRUCTIONS

1. Frequent cleaning of the interior and exterior with water and a good fungicidal detergent that eliminates harmful bacteria, stains and other foreign matter, will keep the unit fresh and new looking.
2. Shelves and/or drawers should be removed from the cabinet and thoroughly scrubbed. Clean door gasket periodically.
3. The unit cooler fan operates continuously when the door is closed and requires no lubrication. These models require no manual defrosting. The cooling coil automatically defrosts when the condensing unit is on the off cycle.
4. The condensing unit needs no oil or other lubrication. The finned condenser can become clogged with lint or dust. The openings between the fins should be kept clean. A vacuum cleaner or small test tube brush works well for this purpose. This should be accomplished on an annual basis. Failure to keep the condenser fins free of dirt and lint will result in erratic operation and may damage the refrigeration system.
5. Annual inspection of the mechanical refrigeration equipment by a qualified serviceman is recommended. A qualified mechanic can frequently make adjustments that will prevent future breakdown.
6. The refrigeration system is charged with refrigerant R134a. If the system is opened for any reason, extreme care should be taken to prevent the entry of moisture-bearing air. A new drier should be installed in the lines when the system is closed.

TROUBLESHOOTING SERVICE CHART

	SYMPTOM	POSSIBLE CAUSE	POSSIBLE CORRECTIVE STEP
A	Compressor will not start, no hum	1. Line disconnect switch open.	1. Close disconnect switch
		2. Fuse blown or breaker tripped.	2. Check electrical circuits and motor windings for shorts or grounds. Investigate for possible overloading. Replace fuse or reset breaker after fault is corrected.
		3. Thermal overload tripped.	3. Overloads are automatically reset. Check unit closely when compressor comes back on line.
		4. No cooling required	4. None. Wait until control calls for cooling.
		5. Control contacts stuck in open position.	5. Replace control.
		6. Loose wiring.	6. Check all wiring junctions, tighten all terminal screws.
		7. Improper wiring	7. Check wiring against diagram.
		8. Liquid line solenoid valve will not open.	8. Repair or replace solenoid coil
		9. Motor electrical trouble.	9. Check motor for open windings, Short circuit or burn out.
		10. Liquid line solenoid will not open.	10. Repair or replace coil.
B	Compressor will not start, hums but trips on thermal overload.	1. Low voltage to unit.	1. Determine reason and correct.
		2. Start capacitor failure or wrong.	2. Replace start capacitor.
		3. Run capacitor failure or wrong.	3. Replace run capacitor.
		4. Start relay failure or wrong.	4. Replace start relay.
		5. Motor electrical trouble.	5. Check motor for open windings, Short circuit or burn out.
		6. Internal mechanical trouble in compressor.	6. Replace compressor.
		7. Improper wiring	7. Check wiring against diagram.
		8. Excessively high discharge pressure.	8. See high discharge pressure symptom.
C	Compressor starts, but does not switch off of start winding.	1. Low voltage to unit.	1. Determine reason and correct.
		2. Run capacitor failure or wrong.	2. Replace run capacitor.
		3. Start capacitor failure or wrong.	3. Replace start capacitor.
		4. Start relay failure or wrong.	4. Replace start relay.
		5. Motor electrical trouble.	5. Check motor for open windings, Short circuit or burn out.
		6. Internal mechanical trouble in compressor.	6. Replace compressor.
		7. Improper wiring.	7. Check wiring against diagram.
		8. Excessively high discharge pressure.	8. See high discharge pressure symptom.

TROUBLESHOOTING SERVICE CHART

	SYMPTOM	POSSIBLE CAUSE	POSSIBLE CORRECTIVE STEP
D	Compressor starts and runs, but short cycles on overload protector.	1. Excessively high discharge pressure.	1. See high discharge pressure symptom.
		2. Low voltage to unit.	2. Determine reason and correct.
		3. High voltage to unit.	3. Determine reason and correct.
		4. Thermal overload protector defective.	4. Check current, Replace protector.
		5. Run capacitor failure or wrong.	5. Replace run capacitor.
		6. Motor electrical trouble.	6. Check motor for open windings, Short circuit or burn out.
		7. Improper wiring causing additional current to pass through overload protector.	7. Check wiring diagram. Check for added fan motors, heaters, etc., connected to wrong side of protector.
E	Compressor starts and runs, but short cycles on temperature or pressure controls.	1. Differential set too close.	1. Widen differential.
		2. High discharge pressure.	2. See high discharge pressure symptom.
		3. Low discharge pressure.	1. See low discharge pressure symptom.
F	Compressor runs long or continuously.	1. Shortage of refrigerant.	1. Leak check and repair.
		2. Control contacts stuck or frozen.	2. Clean contacts or replace control.
		3. Refrigerated air space has an excessive load.	3. Determine reason and correct.
		4. Dirty Condenser	4. Clean condenser.
		5. Evaporator coil iced.	5. Defrost and check defrost circuit.
		6. Restriction in refrigeration system.	6. Determine location and remove.
		7. Evaporator fan motors not running.	7. Determine reason and correct. Check door switch.
G	Compressor noisy or vibrating.	1. Flooding of refrigerant into crankcase.	1. Check expansion device and refrigerant charge.
		2. Improper piping support.	2. Relocate tubing or add hangers.
		3. Worn compressor.	3. Replace compressor.
		4. Loose parts or mounting.	4. Find and tighten.
		5. Condenser fan blade loose or impeded.	5. Check and repair.
H	High Discharge pressure.	1. Non-condensables in system.	1. Remove the non-condensables.
		2. System overcharged with refrigerant.	2. Correct the charge.
		3. Discharge shutoff valve partially closed.	3. Open valve.
		4. Condenser fans not running.	4. Check electrical circuit.
		5. Dirty condenser.	5. Clean.
I	Low discharge pressure.	1. Suction shutoff valve partially closed.	1. open valve.
		2. Insufficient refrigerant in system.	2. Check for leaks. Repair and add charge.
		3. Low suction pressure.	3. See low suction pressure symptom.

TROUBLESHOOTING SERVICE CHART

	SYMPTOM	POSSIBLE CAUSE	POSSIBLE CORRECTIVE STEP
J	High suction pressure.	1. Excessive load.	1. Reduce load or add additional equipment.
		2. Expansion valve overfeeding.	2. Check remote bulb. Adjust superheat.
K	Low suction pressure.	1. Insufficient refrigerant in system.	1. Check for leaks. Repair and add charge.
		2. Restriction in refrigeration system. Most notably the liquid line filter drier or capillary.	2. Determine location and remove.
		3. Expansion valve malfunctioning.	3. Check and reset for proper superheat.
L	Suction line frosted or sweating.	1. Expansion valve passing excess refrigerant or is oversized.	1. Readjust valve or replace with smaller valve.
		2. Expansion valve stuck open.	2. Clean valve of foreign particles, and replace if necessary.
		3. Evaporator fan motors not running.	3. Determine reason and correct. Check door switch.
		4. System overcharged with refrigerant.	4. Correct the charge.
M	Liquid line frosted or sweating	1. Restriction in liquid line filter drier.	1. Determine location and remove.
		2. Liquid line shutoff valve partially closed.	2. Open valve.
N	Ice accumulating on ceiling around evaporator and/or on fan guards or blades.	1. Defrost duration too long.	1. Adjust defrost termination.
		2. Fan delay not delaying fans after defrost period.	2. Defective fan delay thermostat. Replace.
		3. Defective timer.	3. Replace.
		4. Too many defrost cycles per day.	4. Adjust timer for less defrost cycles.
O	Evaporator coil not clearing of frost during defrost cycle.	1. Coil temperature not getting above freezing point during defrost.	1. Check heater operation, or hot gas solenoid valve.
		2. Not enough defrost cycles per day.	2. Adjust timer for more defrost cycles.
		3. Defrost cycle too short.	3. Adjust timer for longer defrost cycle.
		4. Poor door seal.	4. Adjust door latch, install new gasket.
		5. Defective timer or defrost thermostat.	5. Replace defective component.
P	Ice accumulating in drain pan.	1. Defective heater.	1. Replace heater.
		2. Unit not pitched properly.	2. Check and adjust if necessary.
		3. Drain line plugged.	3. Clean drain line.
		4. Defective drain line heater.	4. Replace heater.
		5. Poor contact between drain pan and heater element.	5. Repair.
		6. Defective timer or defrost thermostat.	6. Replace defective component.

NOTE: Jewett Refrigerators and Freezers are designed to operate in areas that are heated to 60° F (15.6° C). Installation in unheated areas may require a low temperature compressor protection kit for satisfactory operation.