

TRAULSEN TECHNICAL BULLETIN

PRODUCT SERVICE DEPARTMENT

FORT WORTH, TX 76106

TROUBLESHOOTING A FROZEN EVAPORATOR COIL

Introduction:

This bulletin is intended to aid in diagnosing the root cause of a frozen evaporator coil on a Traulsen upright reach-in refrigerator or freezer. This technical bulletin may not cover all situations that may arise in the field and final diagnosis of field based equipment is the sole responsibility of the technician contracted to perform any work required.

Troubleshooting Table

| Potential Causes | Details |
|---|--|
| Cabinet Sensor out of tolerance (See TTB006 Sensors for sensor troubleshooting) | <ul style="list-style-type: none"> • Color: Green • Control parameter $\square \square$ • Reads return air • Compressor cycles off of cabinet sensor value |
| Coil Sensor out of tolerance (See TTB006 Sensors for sensor troubleshooting) | <ul style="list-style-type: none"> • Color: Blue • Control parameter $\square \square$ • Reads evaporator coil temperature • Terminates defrost @ 45°F • Fan delay |
| Ambient Air Infiltration | <ul style="list-style-type: none"> • Door(s) not closing properly • Gasket(s) not sealing properly • Door(s) left open for extended periods of time • Evaporator hump cover not sealed properly |
| Compressor relay stuck closed | <ul style="list-style-type: none"> • Coil voltage 12VDC • Coil wires: Pink • Contacts <ul style="list-style-type: none"> ○ Common: Black wire ○ N/O: Blue wire |
| Lack of Air Flow | <ul style="list-style-type: none"> • Evaporator fan motor not functioning • Obstruction in air duct or at evaporator coil |
| Refrigeration System (Traulsen recommends the refrigeration system be tested using the methods outlined in TTB009) | <ul style="list-style-type: none"> • Low charge • Restricted metering device • Moisture/contaminates in the system |
| Defrost Heater | <ul style="list-style-type: none"> • Defrost heater open • Defrost heater circuit or relay open |
| Control Settings (See All Series – Quick Reference Guide for instructions on accessing the control head) | <ul style="list-style-type: none"> • Set point to low (refrigerator only) <ul style="list-style-type: none"> ○ Control parameters: $\square \square$ or $\square \square \square$ & $\square \square \square$ (depending on the age of control system) • Defrost lockouts set to frequently <ul style="list-style-type: none"> ○ Control parameters: $\square \square 1$, $\square \square 2$, $\square \square 3$, $\square \square 4$ |

Contact Traulsen Technical Service:

If further assistance is needed feel free to contact Traulsen Technical Service at 800-825-8220 between the hours of 7:30am – 11:30am CST & 12:30pm – 4:30pm CST.