HVAC1120

Domestic Refrigeration

Course Description

Covered are new and late model refrigerators and freezers. Topics include installation, electrical, and mechanical troubleshooting. (3 Cr 1 lec/pres, 2 lab, 0 other)

Course Goals

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. Explain EPA Laws and Regulations
2. match domestic refrigeration terms/definitions
3. identify refrigerator cabinet hardware/trim
4. define sealed system component terms
5. identify evaporator types
6. identify condensor types
7. identify compressor types
8. identify domestic refrigeration types
9. list refrigerator data plate items
10. list most common domestic refrigerator problems
11. replace refrigerator trim
12. adjust refrigerator door
13. match refrigerator defrost/electrical control terms/definitions
14. identify refrigerator electrical control
15. locate refrigerator controls
16. replace compressor
17. replace refrigerator compressor
18. install compressor low side service stub
19. install refrigerator lines service valves
20. install high side line filter/dryer
21. discuss hot gas components/control
22. replace Whirlpool refrigerator defrost timer
23. replace Whirlpool refrigerator temperature control
24. replace Whirlpool refrigerator defrost heater
25. replace Frigidaire refrigerator defrost timer
26. replace Frigidaire refrigerator temperature control
27. replace Frigidaire refrigerator defrost heater
28. check refrigerator simulator amperage/voltage/watts
29. troubleshoot refrigerator simulator with partial restriction
30. troubleshoot refrigerator simulator with total restriction
31. solve refrigerator simulator problems
32. list domestic refrigerator heater types
33. match frost free refrigerator problems/troubleshooting procedures
34. diagnose customer's refrigerator complaint
35. demonstrate refrigerator installation
36. install refrigerator with ice maker

Student Contributions

Each student will spend at least 4 hours per week preparing for class. Attendance is critical in this class.

Course Schedule

The class meets for 1 lecture hour and 4 lab hours per week.

Developed/Revised: September 9, 1998