

## Service Bulletin

SUBJECT: DANFOSS TXV BRAZING INSTRUCTIONS	Number: Product: Date Issued: From:	09-06 Cuber June 2009 Technical Service
	FIOIII.	Technical Service

Most models of current production ice machines use the Danfoss manufactured expansion valve. Danfoss stainless steel thermostatic expansion valves require a different brazing technique than the brass valves. Copper clad stainless steel does not require as much flame contact as copper tubing. The following brazing procedure should be followed to insure the proper installation of the TXV.

**Brazing Procedure:** 

- 1. Wrap new valve with a wet rag.
- 2. Purge nitrogen through system while brazing to prevent oxidation of copper tubing.
- 3. Apply heat to the copper tubing first and move the flame toward the expansion valve socket.
  - a. Heat the copper tubing for approximately 10 to 15 seconds then direct the heat to the TXV socket.
    - b. Heat the TXV socket for 2 to 5 seconds and apply 15% silver solder to joint. (do not use flux)
    - c. Do not attempt to fill the TXV flange with solder, solder will draw into socket.
- 4. Install new liquid line drier.
- 5. Pressure test system for leaks.
- 6. Mount thermal bulb at either the 11 or 1 O'clock position.
- 7. Insulate the thermal bulb and seal airtight.
- 8. Insulate the expansion valve to prevent condensation.
- 9. Verify system operation; refer to the service manual for complete specifications.

