

## General Requirements and Safety Precautions for Servicing and Repairs

**NOTE:** General Requirements.

One of the most important requirements when filling the air conditioning system is to use clean refrigerant. Any foreign substances - including air, moisture and dirt - in the air conditioning circuit influence temperatures and pressures. This has an adverse affect on the operation of the system. In addition, these foreign substances can cause defects such as failure of the compressor due to excessive wear.

**NOTE:** Precautions.

- Make sure that tools, measuring equipment and replacement parts are clean and dry.
- Before they are disconnected, refrigerant hoses, unions and connectors must always be cleaned of dirt, water, oil etc to prevent contamination of the system. Then all open connections must be capped or plugged immediately to stop dirt or moisture getting in.
- Note: If air gets into the circuit, it will harm the system as it contains moisture and dirt and thus reduces cooling. Therefore, always close off lines and connections immediately.
- When unions are undone, O-rings must always be renewed and lubricated with refrigerant oil prior to their installation.
- Keep all necessary equipment and tools within easy reach so that the system is not left open any longer than necessary.
- When topping up the refrigerant oil, make sure that the filling equipment (hose, reservoir) is clean and dry. Seal the oil container immediately after use.
- To ensure that the system will operate correctly when refilled from new, evacuate the system (suck it dry) for about 30 minutes prior to filling. This will evaporate and evacuate any moisture from the system.
- After repair work all connections which were loosened must be checked for leaks using a leak tester.

**NOTE:** If the main components in the air conditioning system - such as the compressor, condenser, evaporator or hoses - have been renewed, the dehydrator must always be renewed. Similarly, if the air conditioning system has been opened for servicing for longer than two hours, the dehydrator must again be renewed.