
Type I

This section includes proper recovery techniques and industry requirements for small appliances, including recovery in equipment made before and after November 15, 1993.

1. What is the maximum allowable factory charge of refrigerant for Type I appliances using CFCs, HCFCs, or HFCs?

- 3 pounds
- **5 pounds**
- 10 pounds
- 15 pounds

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2. Which of the following are included in EPA's definition of a "small appliance?"

- **Products manufactured, fully charged and hermetically sealed in a factory.**
- Products having 15 pounds or less of refrigerant.
- Products with compressors under 1 horsepower.
- Fully charged components ready for installation in a split system.

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3. When using a self-contained recovery device on a CFC, HCFC, or HFC system with an operating compressor, technicians must:

- recover the refrigerant to 5 inches of mercury vacuum.
- recover 80% of the nameplate charge
- recover the refrigerant to both 4 inches of mercury vacuum and 80% of the nameplate charge.
- **either recover the refrigerant to 4 inches of mercury vacuum or 90% of the nameplate charge.**

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4. Which refrigerants can be mixed in an appliance?

- R-22 and R-407C
- R-12 and R-134a
- R-407C and R-410A
- **Refrigerants cannot be mixed**

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5. A passive system-dependent recovery process for small appliances

- still uses a pump to recover refrigerant.
- must use pressure relief device when recovering refrigerant.
- **captures refrigerant in a non-pressurized container.**
- can only be performed on a system with an operating compressor.

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6. What may be done to speed the recovery process and ensure that all CFC, HCFC, or HFC refrigerant has been removed from a frost-free refrigerator?

- Cool the compressor to force liquid out of the high side.
- Heat the recovery cylinder to vaporize liquid refrigerant.
- **Turn on the defrost heater to increase the refrigerant's temperature and vaporize any liquid.**
- Pack ice around the evaporator to ensure maximum liquid is available.

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7. If a reclamation facility receives a tank of mixed refrigerant, they may:

- **refuse to accept the refrigerant or charge extra for processing it.**
- vent the refrigerant.
- resell the refrigerant for reuse in its current state.
- agree to separate the refrigerants, by the fracking process.

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8. Why should low and high side access valves be installed when recovering refrigerant from a household refrigerator?

- **To improve speed of recovery.**
- To prevent non-condensables contamination.
- To protect the recovery machine.
- To prevent oil migration.

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9. All appliances must be equipped with a service aperture or process stub which is used when adding or removing refrigerant from the appliance. What is typically used on small appliances?

- **A straight piece of tubing that is entered using a piercing access valve.**
- A line located 15 inches below the compressor.
- A valve installed at the factory which has a 1/4 inch diameter and machine threads.
- A service aperture or process stub is not present because small appliances are exempt from this requirement.

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10. What is the maximum normal charge of HCFC or HFC refrigerant in an appliance that is allowed to use system dependent recovery equipment?

- 5 pounds
- 10 pounds
- **15 pounds**
- 50 pounds
