# 'Topping Up' of air conditioning/ refrigeration systems is not allowed

'Topping up' means adding refrigerant to refrigeration and air conditioning systems before checking for, and fixing, any leaks. This is not allowed under the Australian codes of practice for handling both stationary and automotive refrigerant systems. 'Topping up' is not allowed for any existing system charges.

# 'Topping up' and the refrigerant handling codes of practice

The refrigerant codes of practice are best practice guidelines on handling refrigerant for ARC-licensed technicians. They have been developed under the *Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995*. The codes are mandatory and help to reduce emissions of ozone depleting substances into the atmosphere. This is consistent with Australia's obligations as a signatory to the Montreal Protocol.

The following references are taken from the codes of practice on the 'topping up' of refrigeration and air conditioning systems:

#### The Australian automotive code of practice 2008 states:

'The addition of refrigerant to an existing system charge to 'top up' must not be carried out' (A.4.1).

#### The Refrigerant handling code of practice 2007 states:

'Users are advised that persons who service refrigeration and air conditioning equipment are required by legislation to observe this code of practice and not to 'top up' systems known to be leaking or service equipment unless it can be returned into service in a leak free condition' (Part 1-10.3; Part 2-pg. 27).

Copies of the Codes of Practice can be downloaded from the ARC website **www.arctick.org**. For further information visit the ARC website or call the ARC on 1300 884 483.

## Why 'topping' up is not allowed

'Topping up' is bad for the environment. If you haven't checked for, and repaired, any leaks you will release refrigerant to the atmosphere.

Fluorocarbon refrigerant is found in most household and car air conditioning systems. It is an ozone depleting substance and synthetic greenhouse gas. If released into the atmosphere, it can damage the ozone layer and contribute to global warming. The ozone layer protects life on earth by absorbing ultra-violet (UV) radiation from the sun. UV radiation is linked to skin cancer, genetic damage and immune suppression in humans and other living organisms.

You also run the risk of mixing refrigerants. If you add refrigerant to an existing system charge before you identify the existing refrigerant, you risk mixing refrigerants. This can weaken the performance of the system. There may also be a safety risk.

These are the reasons why discharging fluorocarbon refrigerant is illegal under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. Penalties of up to \$66,600 for individuals and \$333,000 for corporations may apply. Only ARC-licensed technicians can handle and trade fluorocarbon refrigerant in Australia.

## How to avoid the risk of mixing refrigerants

- Correctly label the refrigerant type in systems.
- Make sure you identify the refrigerant in systems before fixing them.
- Ensure your recovery cylinders are the right type for the refrigerant identified and are labelled correctly.

#### **About the ARC**

The Australian Refrigeration Council Ltd (ARC) administers refrigerant handling licences and refrigerant trading authorisations on behalf of the Australian Government. They provide licences and authorisations to professionals in the refrigeration/air conditioning industry. To enquire about applying for a licence visit www.arctick.org or call 1300 884 483.