

g a s | f o c u s

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Conversions of Type A gas appliances

Type A and Type B gas appliances may be converted from another fuel such as coal or liquid fuel to operate on gas.

These appliances will generally be treated as new appliances, thus requiring full approval.

The following guidelines are provided for approval of Type A gas appliances converted between LP Gas and Natural Gas.

Using a manufacturer's approved conversion kit and procedure

The Director of Energy Safety accepts for use in Western Australia, a manufacturer's conversion kit that has been tested and certified by the Australian Gas Association (AGA).

A gas fitter can carry out the conversion and commissioning of an appliance using an AGA certified manufacturer's conversion kit/procedure.

An inspector's approval or re-certification of this type of appliance is not required as the original appliance certification would be for use with both gases.

Using an equivalent manufacturer's kit and procedure

Where an equivalent to the manufacturer's conversion kit and procedure is to be used, the kit and procedure is to be approved by a Type A Gas Appliance Inspector.

The approval of the Type A Gas Appliance Inspector must include an assessment of the kit/procedure (to ensure that the



conversion kit is fit for purpose and can be safely installed on site in accordance with the approved procedure) and testing to the appropriate Australian Standard of one appliance fitted with the kit using the new gas.

The Type A Gas Appliance Inspector will then issue written approval for use of the kit and procedure for conversion of the particular model of appliance by a gas fitter.

The approval given by the Type A Gas Appliance Inspector is limited to 20 units of the same make and model at one time. For approval of more than 20 units, the Director's written approval must be obtained and may require additional sample testing.

Each kit must include a compliance badge issued by the Type A Gas Appliance Inspector. The gas fitter is required to fix the compliance badge in a prominent location on the appliance (preferably alongside the data badge) after successful commissioning of the gas appliance.

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Using a conversion kit and procedure based on specific requirements of the appliance, where no conversion kit/procedure exists

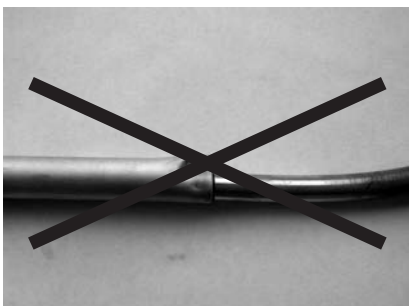
Where a manufacturer's kit and procedure does not exist, if an appliance can be converted to use another gas, then the appliance, after conversion, will require full approval from a Type A Gas Appliance Inspector.

The appliance is therefore treated as a new appliance. Every appliance, after conversion, requires to be individually tested for compliance with the appropriate Australian Standard. The appliance must also be fitted with a compliance badge issued by the Type A Gas Appliance Inspector.

Acceptable methods of joining copper pipes of different diameters

It is common practice for some gas fitters to join copper pipe of different diameters by using the 'crimping' or 'expanding' methods.

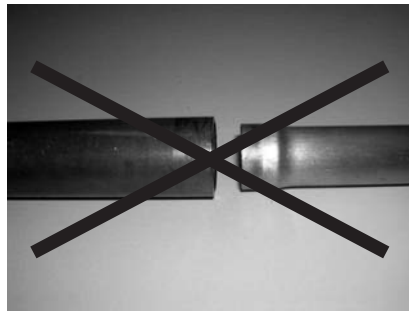
'Crimping' involves inserting a smaller diameter pipe into a larger diameter pipe, crimping the larger diameter copper pipe to form a seal around the smaller diameter pipe and then brazing the resultant joint.



"Crimping" method not permitted

'Expanding' involves increasing the diameter of the smaller pipe and inserting it into a larger diameter

pipe (for example, expanding a 15mm pipe into a 20mm pipe) and then brazing the resultant joint.



"Expanding" method not permitted

These two practices do not comply with the requirements of Australian Standard AS 5601 "Gas installations" and are therefore not acceptable.

Clause 3.2.1 of AS 5601 requires pipe, fittings and jointing methods to comply with Table 3.1 of the Standard.

There are four acceptable methods of joining copper pipe using open-flame brazing method:

- Copper alloy brazing capillary fittings to AS 3688;
- Junctions formed with an appropriate mechanical branch-forming tool;
- Sockets formed with an appropriate mechanical tube-expanding tool for spigot and socket joining. (spigot and socket joining lengths of tube); and
- Brazing flange, copper alloy to AS 2129.

Gas fitters are advised that where sections of pipe of different diameters are to be joined, the joining shall be made by use of an appropriate fitting that complies with AS 3688.

Gas installations completed after January 2006 and found to contain non-compliant brazed joints will result in a notice of defect being issued to the gas fitter.



Approved copper flanges to AS 2129



Acceptable method of joining pipes

Gas Inspectors' Conference 2005

EnergySafety held its annual Gas Inspectors' Conference at the Technology Park Function Centre in Bentley on 8 June 2005.

The conference was attended by about 50 delegates and included gas installation inspectors, reconditioned appliance inspectors, independent Type A and Type B appliance inspectors and EnergySafety inspectors.

Presentations were given on the following subjects:

- Inspections of LP Gas installations
- Independent Type B gas inspectors
- Relief valves
- Ratio controllers
- Air/fuel ratios



Delegates at the Gas Inspectors' Conference at the Technology Park Function Centre in Bentley

- The scope of gasfitting work
- Pressure testing of gas installations
- Disciplinary matters relating to the new State Administrative Tribunal.

The forum also provided opportunities for lively discussion throughout the day.

Interpretations of AS 5601 requirements

EnergySafety has introduced a formal process for dealing with 'interpretations' of Australian Standard AS 5601 "Gas installations" requirements.

In most instances, gas industry people are able to obtain an interpretation of the requirements of AS 5601 through either a gas supplier's inspector or an EnergySafety inspector.

Now, if further consideration of an issue is required or is necessary, the matter may be referred to EnergySafety for a formal interpretation. This will involve submitting an "Interpretation Request" form to EnergySafety. The following information must be provided in the form:

- the relevant regulation or Clause;

- details of the particular concern or query; and
- any supporting information (such as diagrams, photographs etc).

EnergySafety will consider the request and, if appropriate, issue a formal 'interpretation' from the Director of Energy Safety.

These interpretations will be promulgated on EnergySafety's website.

Request forms for this purpose will also be available from the website.

This new process will be launched early in December 2005.

Gas safety alert – SIDEK pressure relief valves

On 26 August 2005, the Liquefied Petroleum Gas Association (LPGA) issued a safety alert to autogas motorists regarding a specific type of pressure relief valve fitted to vehicles.

The component is a SIDEK PRX pressure relief valve (PRV) with AGA Approval Number 6394 engraved on the top of the valve (see picture). These valves may have been fitted to autogas vehicles between August 2003 and August 2005. They can be readily identified by LP Gas test stations, autogas mechanics, installers and repairers.

The LP Gas industry is proactively checking vehicles that may have been fitted with the pressure relief valves. The investigation outcomes indicate that if the autogas tank has

been overfilled, the pressure relief valve may not operate to protect the tank. This could result in failure of the tank.

The following information should be passed on to autogas motorists:

- If your vehicle was fitted with autogas, or its tank was retested during the period between August 2003 and August 2005 and you have a SIDEK PRX valve in your vehicle, you will need to call the helpline (by telephoning 1300 760 033) or ew the LPGA website www.lpgaaustralia.com.au.
- For vehicles fitted with more than one tank, it is critical you contact the helpline immediately.

Autogas vehicle checks associated with this issue will be at no cost to the autogas motorist, and where necessary, the valve described will be replaced.



Autogas motorists are reminded that a problem only exists where a SIDEK valve has been used, and if the tank is overfilled. Autogas motorists should avoid an overfill situation by restricting the tank fill to three-quarters full, until the vehicle pressure relief valve is checked.

Further information is available from the LPGA website at www.lpgaaustralia.com.au.

Prosecutions for breaches of Legislation 1 July 2005 to 30 September 2005

<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Legislation and Breach</i>	<i>Offence</i>	<i>Fine (\$)</i>	<i>Court Costs (\$)</i>
<i>Benjamin Ives (Wanneroo)</i>	<i>GF 007592</i>	<i>GSA Section 13A(2)</i>	<i>Carrying out gasfitting work while not holding a certificate of competency, permit or authorisation</i>	<i>650.00</i>	<i>250.00</i>

Legend:

GSA Gas Standards Act 1972

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