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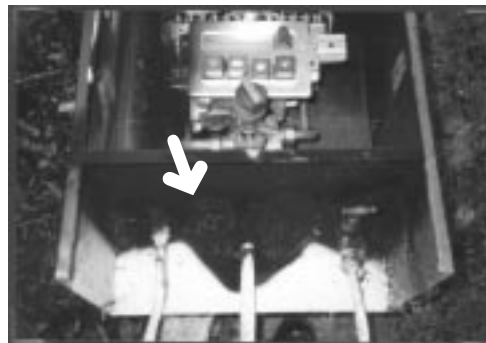
Another Kinco Failure – Another Fire

In previous issues of “Gas Focus”, we have warned of the dangers of using Kinco nuts in gas installations.

A recent fire in a water heater has prompted yet another warning to industry.

The rubber seal inside a Kinco nut failed, allowing gas to escape. Fortunately an alert person noticed a small flame under the water heater and the gas supply was promptly turned off. The pilot light or the main burner probably ignited the escaping gas.

Fire damage to the water heater was substantial and the unit had to be replaced.



Substantial damage occurred to the water heater

Gas fitters are reminded of the following:

Clause 3.2.3 (c) of the Gas Installation Code AG 601 prohibits the use of an “olive-type fitting”. Kinco compression fittings are considered such a fitting and cannot be used on Natural Gas or LP Gas installations.

Gas fitters should only use approved fittings for the connection of gas appliances and equipment. Flared connections are the preferred and accepted method of connection recognised by the Office of Energy and the gas industry at large.

Pressure Testing

Regulation 26 of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* allows for the use of air, carbon dioxide, nitrogen or the gas to be used as the medium, for testing of a consumer’s gas installation.

Appropriate cautions must be taken when using carbon dioxide and nitrogen, as these are compressed gases. It is also important to use the appropriate regulated pressures when testing.

When using compressed air for pressure testing, it is important to use the appropriate pressures for the installation. Good hand pumps or small 12 volt compressors are adequate for larger gas installations.

Do not use other “non approved” mediums. In a recent incident, a gas fitter resorted to using another readily available compressed gas, oxygen, from an oxy set. He was fortunate on that day; he was stopped by the gas inspector.

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This practice is fraught with danger. Len Herdman, Customer Engineering Services Manager BOC Gas Australia explains, "Compressed oxygen must never be used to pressure test any pipeline or equipment not specifically designed for oxygen service. Oxygen can react with most metals and alloys, plastics, elastomers and natural organic materials."

Len explained, "Under many conditions these reactions are violent and can result in major damage to equipment and personal injury."



BOC Gases has a booklet "Safe Under Pressure" available from their local agents. Your workshop may also contain other compressed gases, so this booklet makes good reading for all.

Remember: It is an offence under the regulations to use oxygen as a testing gas.

Fire Destroys a CNG-fuelled Bus

On 17 July 2001, a fire occurred in a CNG fuelled bus operated by Path Transit for Transperth.

The fire destroyed the bus.

Prior to the incident, Path Transit had engaged a company to work through a program of removing the high pressure fuel containers of CNG fuelled buses, having them hydrostatically tested and rectifying any problems before replacing the containers back into the buses.

To enable this work to be undertaken, the Office of Energy had issued an Authorisation.

Daniel Wallace was the Authorisation holder ("Supervising gas fitter") for the gasfitting work to be performed by the company's personnel.

As this had been a fire in a public transport vehicle and the public needed to be protected, it was considered necessary to suspend the Authorisation pending an Inquiry. This action prevented the work from continuing until the facts could be established. Daniel Wallace's Authorisation was therefore suspended on 27 July 2001.

An Inquiry is an opportunity for a gas fitter to show cause why he or she should not be dealt with in accordance with the provisions of the Act, following concerns about the performance of gasfitting.

The Inquiry was subsequently held on 25 September 2001 and was adjourned to another date due to the length of time taken for examination of the witnesses. It concluded on Friday 12 October 2001 and the outcome is summarised as:

- The Authorisation was suspended for a period of two months from the date of the original suspension.
- Conditions were put on the cylinder verification program

whereby the Authorisation does not allow cylinder verification until safe processes, including the necessary training and safe written procedures are documented and demonstrated to be in place, following a risk management assessment. The restriction on cylinder verification will be removed from the Authorisation once the aforementioned conditions have been met.

Disciplinary Action Taken by the Gas Licensing Committee and Director of Energy Safety

1 July to 31 October 2001

During the period, the Gas Licensing Committee interviewed ten gas fitters about concerns on their gasfitting work. The Committee made recommendations for action by the Director. A summary of the actions taken is:

- One Inquiry was held (the Inquiry into D Wallace – see previous article "Fire Destroys a CNG-fuelled Bus"). The outcome of the Inquiry was that Wallace had his Authorisation suspended and conditions placed on it before the Authorisation can be re-instated.
- One inquiry was commenced (and is continuing).
- Four summary inquiries were held. All of these gas fitters were required to undertake further training. Two of the gas fitters also received a censure.
- Two gas fitters received a warning letter.
- No further action was taken against one operative.

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