



Date: 20 April

BSS EXAMINATION CHECKING PROCEDURES (ECPs) AMENDMENT – GAS HOSE STANDARDS

The BSS Examination Checking Procedures (ECPs) have changed with immediate effect as a result of the introduction of a new European LPG hose standard. The change affects the private craft checks 7.7.3R; 7.9.1R & 8.6.1R. For the 2002 BSS Standards for Non-Private Craft, checks C7.10.4; C7.13.1 & C8.2.2f are amended.

CHANGE REF: ECP01.15. **Date:** 20 April 2015

REASONS FOR ISSUE

A new European LPG hose standard BS EN 16436-1:2014, *Rubber and plastics hoses, tubing and assemblies for use with propane and butane and their mixture in the vapour phase - Part 1: Hoses and tubings*, is published.

These changes to both ECPs ensures that the BSS Standards and the BSS General Requirements continue to be aligned internationally accepted LPG hose standards.



Figure 1: © Codan 2015

DESCRIPTION OF ITEM AND RISK

The EN standard introduces three classes of tubing/hose whereas BS 3212 has only two classes, but otherwise the new standard can be viewed as largely equivalent to BS 3212, but there is an important difference to take account of depending on whether the system is high or low pressure.

HIGH-PRESSURE SYSTEMS

The key difference is this; BS EN 16436 Class 2 hose is unsuited to high-pressure applications on propane systems because of its potential to burst when the LPG cylinder is subject to extreme summer temperatures, such as the conditions created when a boat is covered up.

Accordingly the amended ECPs state that for propane or butane systems on the high-pressure (cylinder) side, where hose marked is marked to BS EN 16436, only Class 3 can be accepted.

LOW-PRESSURE SYSTEMS

On the low-pressure (supply) side for propane, or butane, we can accept BS EN 16436 Class 2 or BS EN 16436 Class 3 hose.

BASIS FOR CHANGE

UKLPG has developed its technical note for users of the standard and our changes matches that position exactly.

The BSS approach to the split classes aligns with the 'Note' at Table 1 in the BS EN that Classes 1 and 2 are usually used downstream of a pressure regulating device.

DETAILS OF ECP CHANGES AND THE IMPLICATIONS FOR EXAMINERS

There are three changes to the third edition of ECPs for Private Boats you must take note of and apply to the checking of LPG hoses. The changes are as follows:-

1. On page 51 of the 2013 ECPs, check 7.7.3R – high-pressure hoses – BS EN 16436 Class 3 is added as an alternative and equivalent marking to BS 3212/2 hose.
2. On page 55, check 7.9.1R – low-pressure hoses – BS EN 16436 Class 2 and BS EN 16436 Class 3 are added as alternatives and equivalent markings to BS 3212/2 hose.
3. On page 62, check 8.6.1R – LPG catalytic heaters – BS EN 16436 Class 2 and BS EN 16436 Class 3 are added as an alternatives and equivalent to BS 3212/2 hose

If you are an examiner authorised for non-private craft examinations, additionally there are two changes to the first edition (2002) of ECPs for Non-Private Boats you must take note of and apply. The changes are as follows:-

- a) Pt.7 Pg.18 – C7.10.4 high-pressure hoses; BS EN 16436 Class 3 is added as an alternative and equivalent marking to BS 3212/2 hose.
- b) Pt.7 Pg.22 – C7.13.1 low-pressure hoses – BS EN 16436 Class 2 and BS EN 16436 Class 3 are added as alternatives and equivalent markings to BS 3212/2 hose.
- c) Pt.8 Pg.5 – C8.2.2(f) bullet 4 Flexible tubing to BS EN 16436 Class 2; BS EN 16436 Class 3 or BS 3212/2.

ADDITIONAL NOTES

The reason for keeping the equal emphasis on BS 3212/2 hose is that manufacturers marking their LPG hose to BS 3212/2 will likely continue well into the future, and examiners will continue to come across LPG hose primarily marked to the BS 3212/2 for ten years or more.

BS 3212 is not withdrawn by BSI. This is because BS EN 16436 Part 2 covering hose assemblies is still in development and is not anticipated until 2016. Only then is it likely that BS3212 will be withdrawn.

ACTIONS LINKED TO THIS BRIEFING

Please apply the checks as specified.

Printed updates are being supplied and pdf files of the affected amended pages on the ECP changes page of the technical updates section are available to download and print out for reference if needed.

New printed pages for the 2002 Non-Private ECPs are not being supplied as these are likely to be replaced within a year of this notice. A pdf file is provided of the affected checks for reference and inclusion of notes into the 2002 checks.

Any questions can be raised with the technical team.