

# CS 31HB.46 Pressurised fuel systems

*ED Decision 2009/005/R*

1. For pressurised fuel systems each part, must be tested to, or have a safe working pressure of at least twice the maximum pressure to which the system will be subjected in normal operation. In the test, no part of the system may leak, fail or malfunction.
2. All parts of a pressurised fuel system must be generally robust and capable of withstanding impact and abuse loads and related deformation that are likely to occur in service. (See AMC 31HB.46(b))
3. If applicable, parts of the pressurised fuel system must be permanently marked to preclude incorrect installation.
4. No part of the system may have an unprotected rigid extension that could be broken in any likely impact situation. (See also CS 31HB.45(f)).
5. Where fuel systems include demountable fuel lines, a self-sealing coupling, or other means must be fitted to each outlet of each line to avoid the release of hazardous quantities of fuel should a fuel cell valve be inadvertently operated without a fuel line outlet connected.

## AMC 31HB.46(a) Pressurised fuel systems

*ED Decision 2009/005/R*

The pressurised fuel system parts include as applicable:

- fuel cells;
- lines and hoses;
- manifolds (including T-pieces);
- fittings.

## AMC 31HB.46(b) Pressurised fuel systems

*ED Decision 2009/005/R*

Connecting parts such as manifolds (including T-pieces) and hoses, between fuel cells should be designed so that they are not subject to pulling forces by significant deformation of the basket during a hard landing. Rigid extensions should be avoided in the design. If rigid extensions are used and could be broken in any likely impact situation they shall be protected.

Abuse loads likely to occur, such as the grabbing of a fuel hose by a passenger during landing or the abrasion of a fuel hose by a control line, should be considered. Hoses should be suitably reinforced (e.g. steel braiding) to withstand these conditions.

Note: Commercially available brass fittings for LPG systems should not be used as they have been shown not to have the required level of robustness.

For fuel system parts extending outside the protected area of the load frame and basket, it should be considered that they might be impacted by obstacles or abuse loads.

## AMC 31HB.46(e) Pressurised fuel systems

*ED Decision 2009/005/R*

“Demountable fuel lines” in the sense of this requirement are fuel lines that are linked by quick disconnect couplings.

→ [CS 31HB.47](#)

From:

<https://www.balloonwiki.org/luftrecht/> - **Ballaeron - wo steht das?**

Permanent link:

<https://www.balloonwiki.org/luftrecht/doku.php/en/cs31hb/46>

Last update: **2023/09/01 07:49**

