Doc. Reference: CBL/TN/FJD/2370 Issue: C Date: 13-01-2021

Service Instruction



1. General

(a) No.:	28
(b) Revision / Date	B / November 2021
(c) Title:	Installation of CB437 Flanged Adaptor
(d) Description:	Procedure for the assembly of the QSO Flanged Adaptor into fuel cylinders
(e) Applicability:	Any fuel cylinder with a ¾-14NGT Liquid feed boss. All cylinders affected by Service Bulletin 32
(f) Effectivity:	All Applicable CN's

Note: Applicability= All types and variants to which the change can be applied.

Effectivity= Actual CN or group of CN's to which the bulletin has been/will be applied.

2. Accomplishment Instructions

This Service Instruction includes details for the installation of CB437 Flanged Adaptor for the fitting of a QSO (Quick Shut-Off) liquid fuel supply. These instructions apply to all types of applicable cylinder.

Preparation

- a. Ensure the cylinder is empty of LPG and has been vented to release propane vapour.
- b. Remove the cylinder liquid fuel fitting (either a handwheel valve or an existing QSO assembly).
- c. Remove any residual sealing compound or PTFE tape from the threaded boss of the cylinder.
- d. Ensure the threaded boss is clean and free from foreign objects, dirt, or grease. Take care to prevent debris failing into the cylinder.

Installation of CB437

1. Wrap the Flanged Adaptor thread with PTFE tape in a clockwise direction when viewed from the pipe end (threaded end). Ensure the thread is covered by two thicknesses of tape. The tape must not extend beyond the top or bottom thread. See Figure 1 for correct application of PTFE Tape.

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Figure 1 - Correct application of PTFE tape

- 2. Apply a PTFE liquid thread sealant to the thread of the Cylinder Boss. The sealant used must be LPG compatible and have anticorrosion properties. An example of acceptable liquid thread sealant is RectorSeal Tru-Blu pipe thread sealant.
- 3. Screw the Flanged Adaptor into the prepared cylinder boss until hand tight.
- 4. Identify one of the four faces of the Flanged Adaptor and mark this face for reference.
 - NOTE: It may also be necessary to mark the Installation tool.
- 5. Using a pneumatic ratchet gun or a long wrench, tighten the Flanged Adaptor 3 full turns. It is recommended that either specialist tool CB2524 or CB7908 is used.
- 6. Tighten further to align the flat edge of the Flanged Adaptor parallel to the Cylinder Gauge Body. See Figure 2 for correct alignment.



Figure 2 - Alignment with Cylinder Gauge Body

WARNING: Orientation of the Flanged Adaptor must only be achieved by tightening. The Flanged Adaptor must never be unscrewed to achieve correct positioning.

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7. Check that the tightening torque exceeds 70 Nm. To achieve this, set a torque wrench to 70 Nm, and attempt to tighten the Flanged Adaptor until the set torque is achieved. The Flanged Adaptor must not rotate at any torque below 70 Nm. If the Flanged Adaptor rotates at a lower torque, tighten the Flanged Adaptor by an additional one quarter turn and check the tightening torque again.

NOTE: If the tightening torque continues to be below 70 Nm after additional tightening, contact Cameron Balloons Ltd for advice.

- 8. Assemble the QSO assembly as normal.
 - NOTE: It is recommended that the body seals of the Ball Valve are replaced if reassembling a QSO assembly, rather than using old seals. In line with manufacturer guidance, the ball seats do not require replacement unless worn or damaged.
- 9. Carry out a leak test of the cylinder using compressed air at a pressure of at least 6 bar (87 psi).

3. Materials

- CB437 Issue H (or later) Flanged Adaptor, QSO Valve
- CU-0000-0007 PTFE Tape
- CU-0000-0008 PTFE Liquid Thread Sealant
- CB-0392-0023 Worcester Body Seals

4. Other Publications Affected None	
5. Remarks None	
Compiled by:	Notes:
Date: 05/11/2021 Name: Oscar Maynard	
6. Design Organisation Approval	
Approval Statement I hereby confirm that these instructions are airworthiness requirements. The technical counder the authority of DOA nr UK.21J.0140 Signed, for and on behalf of Cameron Balloons Lt	ontent of this document is approved
ff Head of Design	Stamp