Omterra - Subsea

ElecTRON

Operating guidelines TC6A – 1380 test adaptor

Document Name: **OPERATING GUIDELINES FOR TC6A-1380 TEST ADAPTOR**

Document Number: **E1A4318573**

Revision	Author	Checker	Approver	Issue Date
A	**D. M^{C}DOUGLE**	**K. TURNER**	**S. KELLY**	**21/11/2024**
	INITIAL ISSUE			

REVISION CONTROL: History of Revision Control is Managed by the Document Management System.

Omterra 2026. All Rights Reserved

Restricted

1 PURPOSE & SCOPE

The purpose of this procedure is to detail the process for the use of the Dry Mate Receptacle pressure test adaptor, TC6A-1380.

The TC6A-1380 test adaptor is used during the on-site installation of the Dry Mate Receptacle Connector TC6A-512 & TC6A-716 series of connectors.

This design is based on the TC6A-1190 test adaptor, with 3 mounting bolts and a reversible body to be used on Baker Hughes 7" Tubing Hanger systems with the 3-bolt mounting interface.

The Maximum Allowable Working Pressure (MAWP) of the Test Adaptor is 15,750 psi (1,086 bar). THIS ***MUST*** NOT BE EXCEEDED.

The Test Adaptor is suitable for repeat testing. As long as the prerequisite checks shown in Section 5 are satisfied.

2 ASSOCIATED DOCUMENTS AND DRAWINGS

Number	*Name*	*Location*
10032136	TC6A-512 Product Data Sheet	Teamcenter
10204852	ElecTRON Installation, Operations and Maintenance Manual	omterra.com/subsea
E1A4317897	TC6A-1380 PDS	Teamcenter
SD00021241	TC6A-716 Product Data Sheet	Teamcenter
SD20012885	TC6A-1380 Drawing and Associated BOM	Teamcenter
T17087	DHCE-A51 Drawing and Associated BOM	Teamcenter
T18358	DHCE-A70 Drawing and Associated BOM	Teamcenter

3 EQUIPMENT

The following equipment will be required to complete this installation:

- 1/2” Drive Torque Wrench rated for 40 lbf·ft (54 Nm) – e.g. NOR-13019.
- 3/8” A/F Torque Wrench hexagon 1/2" drive fitting.

4 GENERAL SAFETY INFORMATION AND RISKS

- For full Safety and Hazard information, please consult the ElecTRON IOM or Safety Data Sheet for the test media in use.

	**Warning.** Risk of minor personal injury to persons with sensitivities to mineral based oils. Wear appropriate hand protection when handling products or mineral or synthetic based oils.
	**Warning.** Risk of minor personal injury and/or material or environmental damage during assembly. Caution shall be exercised during assembly to ensure that fittings and hydraulic/pneumatic equipment are correctly installed.
	**Warning.** Risk of bodily injury caused by pressure retaining parts becoming projectile due to user over-pressurising the system.
	**Warning.** Hydraulic injection risk. Only to be used below MAWP with oil and suitable pump in line with Pressure Equipment (Safety) Regulations (2016) or relevant local alternative when used abroad.

Omterra 2026. All Rights Reserved

Restricted

5 PREPARATION

- Visually inspect the assembly, ensure there is no damage to the sealing cones, elastomeric seal, threads, or body of the Test Adaptor. If there is any doubt over the integrity of the Test Adaptor or any of its components, stop work immediately, quarantine the equipment and contact the Omterra Technical Department.
- Clean Test Adaptor with isopropyl alcohol impregnated wipes or suitable lint free cloth and isopropyl alcohol, paying particular attention to the sealing cone face.

6 PROCESS

1. Refer to drawing SD20012885 and associated BOM.
2. Ensure 2 off O-Rings (40) are fitted to Test Adaptor (30), and O-Ring (50) is fitted to Test Adaptor (20).
3. If testing a TC6A-512, fit Seal Energiser Plug (60) to Test Adaptor (30).

> **Note:** If testing a TC6A-716, ensure Seal Energiser Plug (Item 60 on SD20012885) is removed, failure to remove could result in the Dry Mate Contact Pin of the TC6A-716 being damaged.

4. Slide Test Adaptors (20) and (30) together.
5. Slide Fixing Plate (10) over the adaptor assembly, ensuring that the bolt holes will align with the holes on the tubing hanger. Ensure that the assembly sits together flush.

> **Note**: The Fixing Plate is reversible as the mounting holes are mirrored around the centre plane of the Tubing Hanger.

6. Fit test adaptor assembly onto connector to be tested. Ensure that fixing plate sits flush on base of tubing hanger
7. Fit the three off Cap Head Screws (70), fasten hand tight prior to torquing to a value of 54 Nm (40 lbf ft)
8. Fit hose from test equipment to Adaptor (30), tighten to 20 Nm (14.75 lbf ft)
9. Carry out testing as stipulated in associated installation procedure, observing the Test Adaptor MAWP of 15,750 psi, which must not be exceeded.

> **Note**: The installation procedure used will be project dependant and different for TC6A-512 and TC6A-716. These are listed on the appropriate Product Data Sheet.

10. On completion of testing, reduce pressure to ambient and remove oil hose.
11. Loosen cap head screws and remove Test Adaptor assembly from the Tubing Hanger.
12. Wipe up any residual oil from the Test Adaptor and connector under test.
13. Repeat visual inspection as stipulated in Section 5.

END OF PROCEDURE

Omterra 2026. All Rights Reserved

Restricted