Omterra - Subsea

ElecTRON

Test adaptor TC6A-1190

Document Name: **OPERATING GUIDELINES FOR TC6A-1190 TEST ADAPTOR**

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	INITIAL ISSUE			

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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-1190.

The TC6A-1190 test adaptor is used during the on-site installation of the Dry Mate Receptacle Connector TC6A-512 & TC6A-716 series of connectors.

This adaptor can be fitted to the client's Tubing Hanger using either 2 or 4 of the supplied cap head screws. When used in the 2-bolt configuration, the maximum test pressure that may be applied is 10,000 psi (689 bar).

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
SD00021200	TC6A-1190 Product Data Sheet	Teamcenter
SD00021241	TC6A-716 Product Data Sheet	Teamcenter
T31549	TC6A-1190 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.
- 5/16" Hex Key 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.

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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 T31549 and associated BOM.
2. Ensure 2 off O-Rings (20) are fitted to Test Adaptor (10), and O-Ring (60) is fitted to Flanged Adaptor (50).
3. If testing a TC6A-512, fit Seal Energiser Plug (70) to Test Adaptor (10).

> **Note:** If testing a TC6A-716, ensure Seal Energiser Plug (Item 70 on T31549) is removed, failure to remove could result in the Dry Mate Contact Pin of the TC6A-716 being damaged.

4. Fit test adaptor assembly onto connector to be tested. Ensure that Flanged Adaptor body sits flush on base of tubing hanger.
5. Fit the Cap Head Screws (30) and Washers (40) as required, fasten hand tight prior to torquing to a value of 54 Nm (40 lbf ft).
6. Fit hose from test equipment to Test Adaptor (10), tighten to 20 Nm (14.75 lbf ft).
7. Carry out testing as stipulated in associated installation procedure, observing the Test Adaptor MAWP of 15,750 psi, which must not be exceeded.

> **Important Note! When using this adaptor in the 2-bolt configuration, the test pressure MUST NOT EXCEED 10,000 psi.**

> **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.

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

END OF PROCEDURE

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