Omterra - Subsea

ElecTRON

Operating guidelines for TC6A-658 and TC6A-1387 assembly fixtures

Document Name: **OPERATING GUIDELINES FOR TC6A-658 AND TC6A-1387 ASSEMBLY FIXTURES**

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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 Plug Connector Assembly Fixtures, TC6A-658 and TC6A-1387.

The TC6A-658 assembly fixture is used during the on-site installation of the Dry Mate Plug Connector DHCE-A70... series of connectors. The TC6A-1387 is almost identical to the TC6A-658, however it has an insert for testing the DHCE-A51... series of connectors. The relevant assembly fixture is fitted during oil testing of the Dry Mate Plug if the mating Tubing Hanger Dry Mate Receptacle is not available during the testing.

The Maximum Allowable Working Pressure (MAWP) of the Assembly Fixture is 16,500 psi (1,137,6 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*
10204852	ElecTRON Installation, Operations and Maintenance Manual	omterra.com/subsea
SD00021196	TC6A-658 & TC6A-1387 PDS	Teamcenter
T17087	DHCE-A51 Drawing and Associated BOM	Teamcenter
T18358	DHCE-A70 Drawing and Associated BOM	Teamcenter
T18391	TC6A-658 and TC6A-1387 Drawing and Associated BOM	Teamcenter
SD10032016	DHCE-A51 Product Data Sheet	Teamcenter
SD00022433	DHCE-A70 Product Data Sheet	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.
- 15/16" A/F Torque Wrench spanner fitting – e.g. NOR-29712.

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 cone, elastomeric seal, threads, or body of the Assembly Fixture. If there is any doubt over the integrity of the Assembly Fixture or any of its components, stop work immediately, quarantine the equipment and contact the Omterra Technical Department.
- Clean Assembly Fixture with isopropyl alcohol impregnated wipes, paying particular attention to the sealing cone face.

6 PROCESS

1. Clamp the extended flats of Assembly Fixture in a vice with soft jaw grips.
2. Fit Dry Mate Plug body into Assembly Fixture and tighten connector Clamp Ring (Item 20 on Connector Drawings).
3. Torque clamp ring to 40 lbf·ft (54 Nm).
4. Carry out required Pressure Testing as stipulated in relevant Installation Procedure and Pressure Fitting Operating Instructions. These are referenced in the applicable connector Product Data Sheets.
5. On completion of testing, reduce pressure to ambient, remove Assembly Fixture.
6. Repeat visual inspection of Assembly Fixture sealing surface and O-Seal.
7. Clean up any residual oil on connector and Assembly Fixture.

END OF PROCEDURE

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