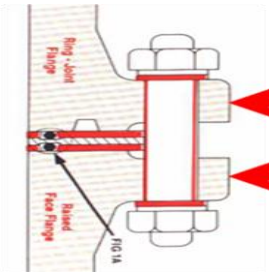
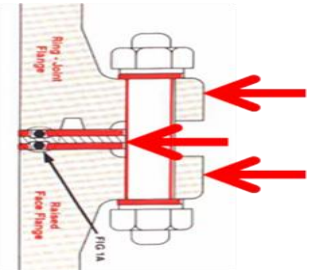
GPT Flange Isolation Kit Isolation Test Procedures for a Dry System

1 Isolation Test Procedure Using a Radio Frequency Insulation Tester

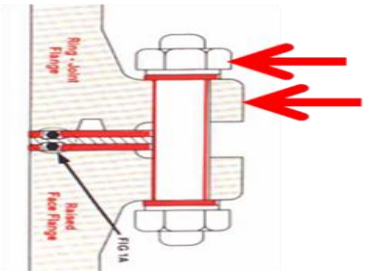
1.1 Install the GPT flange isolation kit according to the installation instructions provided with the kit.
1.2 Ensure that the flanges are not shorted by means of a conductive object between them.
1.3 Use the Radio Frequency Insulation Tester to test the isolation between the two mating flanges.



1.4 If the gasket being used has a metal core (VCS®, VCFS®, VCXT®, VCS-ID® & EVOLUTION™), then also test the isolation between each flange and the gasket core.



1.5 Test the isolation between one flange and each of the studs.



1.6 Repeat step 1.5 for the other flange.

2 Isolation Testing Procedure Using an Ohmmeter

2.1 Install the GPT flange isolation kit according to the installation instructions provided with the kit.
2.2 Ensure that the flanges are not shorted by means of a conductive object between them.
2.3 Connect the leads of the Ohmmeter and set the test voltage to no more than 50V DC*. All resistance measurements for the below steps should be at least 20 MΩ.
2.4 Test resistance between the two flanges.
2.5 Test the resistance between one flange and each of the studs.

2.6 Repeat step 2.6 for the other flange.

Notes:

1 All tests are subject to environmental interference that could produce a false isolation failure. These environmental conditions are outside of the scope of control for GPT or its agents and should be considered when performing isolation tests.
2 Geometric constraints of flanges could require special testing leads to properly test the metal core of gaskets. Use of improper leads could produce a false isolation failure.
3 Parallel conductive paths will provide a false isolation failure when testing using the Resistance Test Method described in Section 2. Radio Frequency testing should be used in these cases.
4 Resistance Testing is strictly a dry flange connection test procedure for connections not containing media. Any presence of media will increase the likelihood of producing a false isolation failure. For flange connections in service use section 9 of NACE SP0286.

*If test voltages higher than 50V DC are preferred, please contact GPT engineering.