This is a controlled document as are all quality system files on this server. Any documents appearing in paper form are not controlled and must be checked against the server version prior to use.

TENNANT 1069467 (U.S.) and 1070541 (Canadian) Functional TITLE: Test 2 (SIM Test)		
REV: B	DATE: 2/26/14	DOCUMENT NUMBER: TI-1863
OWNER: <u>Test Engineer</u>		APPROVAL: Engineering Manager

PURPOSE

The purpose of this document is to define the method for testing the TENNANT 1069467 (U.S) and 1070541 (Canadian) assemblies.

SCOPE

This work instruction provides a step-by-step instruction for testing the TENNANT 1069467 and 1070541 assemblies.

RESPONSIBILITY

It is the responsibility of anyone testing the TENNANT 1069467 and 1070541 assemblies to follow this work instruction.

DEFINITIONS

UUT is Unit Under Test

EQUIPMENT

The TENNANT 1069467 and 1070541 test fixture.

REFERENCE DOCUMENTS

N/A

SETUP

- 1. Turn on the test fixture power
- 2. Login into the test fixture as user mfguser with password mfguser.
- 3. Double click the "Einstein SIM Test" icon to start the test program.

NOTE

The US SIM Serial Number has changed. The test will default to the new serial number. If you need to test a module with an old SIM in it, check the box in the upper left corner of the test screen.

TEST PROCEDURE

- 1. Click the "Scan Serial Number" button for the unit 1 to 8 where you are going to connect the module.
- 2. Use the barcode scanner to enter the assembly serial number.

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- 3. Click the "Scan SIM Number" button for that same unit and use the barcode scanner to enter the SIM number.
- 4. Connect the UUT to the unit cable.
- 5. Connect the antenna to the UUT.
- 6. Click the "Click the Start Test" button for the unit.
- 7. Verify the "Test Passed" message.
- 8. Mark tested unit appropriately.

RECORDS

N/A

REVISION	DATE	COMMENTS
A	3/30/2012	Initial Release
В	2/26/2014	US SIM Serial Number changed

FRM-536 Rev H 8/28/07 This is a controlled document as are all quality system files on this server. Any documents appearing in paper form are not controlled and must be checked against the server version prior to use.

TENNANT 1226955 Functional Test TITLE: (AMII functional test)		
REV: A	DATE: 1/24/17	DOCUMENT NUMBER: TI-2285
OWNER: <u>Test Engineer</u>		APPROVAL: Engineering Manager

PURPOSE

The purpose of this document is to define the method for testing the TENNANT 1226955 assembly.

SCOPE

This work instruction provides a step-by-step instruction for testing the TENNANT 1226955 assembly.

RESPONSIBILITY

It is the responsibility of anyone testing the TENNANT 1226955 assembly to follow this work instruction.

DEFINITIONS

UUT is Unit Under Test

EQUIPMENT

TENNANT 1226955 Functional Test fixture.

REFERENCE DOCUMENTS

N/A

SETUP

- 1. Turn on the test fixture power
- 2. Login into the test fixture as user mfguser with password mfguser.

3.

PROGRAMMING PROCEDURE

1. Double click the "Einstein Power Control" icon to start the test program.



2. Double click the "LM Flasher" utility.



- 3. Connect the programmer to the UUT and connect the UUT to the fixture.
- Select the Program tab and select browse to select the file to load. Browse to C:\Tennant\1226955_Test\Firmware Select the *.bin file. There should only be one file, if there are more contact engineering for assistance.

Make sure to select the Verify After Program and Reset MCU after Program

955_Test\Firmware\1000_IRIS_TM4_Slave_Pr	roduction_Image_0619.bir, Browse
ptions	
Erase Method:	
• Erase Entire Flash - (faster)	
C Erase Necessary Pages - (slower)	
Verify After Program	
Reset MCU After Program	
Program Address Offset: 0x 0	
Program	Hardware Rese

5. From the Einstein power control application turn the power on.

🐖 Einstein Powe	r Control	- • ×	
	Power On		
	Power Off]	
The F	owe	r <mark>is</mark> Off	

6. From the LM Flash Programmer select Program.

elect .bin file 955_Test\Firmware\1000_IRIS_TM4_Slave_Production	_Image_0619.bir ¹ Browse
ptions	
Erase Method:	
Erase Entire Flash - (faster)	
C Erase Necessary Pages - (slower)	
Verify After Program	
🔽 Reset MCU After Program	
Program Address Offset: 0x 0	
Program	Hardware Reset
bis Trans Large	

7. When Programming is complete turn off the power using the Einstein Power Control application.

TEST PROCEDURE

8. Double click the "AMII Functional Test" icon to start the test program.



- 9. Use the barcode scanner to enter the UUT serial number into the "Barcode" box.
- 10. Connect the UUT to the test fixture.
- 11. Click the "Click here to start test" button.
- 12. Verify the "Test Passed" message.
- 13. Mark tested unit appropriately.

RECORDS

N/A

REVISION	DATE	COMMENTS
A	1/24/17	Initial Release

FRM-536 Rev H 8/28/07