



Procedure I – Functional Shock

i Objective

Designed to represent a shock condition typical of that in operational use. The following conditions are taken directly from Table 516.4 Mil-STD-810E.

ii Test Conditions

Min Pe Value (g'	eak s)	Duration (mS)	Qty	Conditions
40G		11	Min 2	To be operational.
			samples	Repeat 3 times for
				each axis.

iii Analysis of Results

- Perform Visual and Functional checks before testing sample.
- Scope plots of Transient shock using appropriate accelerometer.
- Unit should not glitch or fail during or after each test.
- No mechanical failure / functional non-conformance of product.

iv Results

Product Code – V607FVH Serial Number - 2051040394

- Unit was taken directly from production line. Unit was compliant with production standards.
- Scope plots were taken for 3 axis and are in files Run1, Run2, Run 3.
- Unit was on load during shock test.
- Unit passed production ATE test after test.
- No mechanical faults were found with unit.

PASS

Date Issued: 08/06/05	Mil 810E Shock Summary Report		~4020038.doc
A.Irwin	Lambda UK Confidential	Rev 1	Page 1 of 4





Procedure IV – Transit Drop

v Objective

Designed to test determine the structural and functional integrity of the unit in its packaged condition. The packaged condition in this case is a single unit packed in an outer cardboard box filled with foam squiggles.

vi Test Conditions

Using table 516.4 – II, the product should be dropped according to the following:

- Drop height = 122cm
- Total Drops = 26.
- Sample size = 5 max.
- Each corner/edge/ face to be tested = 26.



Use the following table and the diagram above to complete the drop sequence.

A.Irwin	L	ambda UK Confidential		Rev 1	Page 2 of 4
Date Issued: 08/06/05	Mil 810	E Shock Summary I	Report		~4020038.doc
2	2051040404	20]		
2	2051040402	15			
2	2051040402	22]		
2	2051040402	18]		
2	2051040402	7]		
2	2051040402	9]		
2	2051040397	16			
1	2051040397	24			
1	2051040397	10			
1	2051040397	4			
1	2051040397	2			
1	2051040396	23			
1	2051040396	13			
1	2051040396	26			
1	2051040396	3			
1	2051040396	1			
Sample No	Serial Number	Surface No]		

Vega

Mil 810E Shock Summary Report



2	2051040404	14
3	2051040404	12
3	2051040404	11
3	2051040404	25
3	2051040401	17
3	2051040401	19
3	2051040401	21
3	2051040401	5
3	2051040401	6
3	2051040401	8

vii Analysis of Results

- Conduct visual and functional tests on each sample prior start.
- Document impact results (photos) for each sample.
- No mechanical failure / functional non-conformance of product.

<u>viii Results</u>

Product Code – V607FVH Serial Number – 2051040403

- Unit was taken directly from production line. Unit was compliant with production standards.
- No mechanical damaged observed on unit.
- Unit passed production ATE test.
- Moderate crumpling of cardboard inner observed.

Product Code – V607FVH Serial Number – 2051040395

- Unit was taken directly from production line. Unit was compliant with production standards.
- No mechanical damaged observed on unit.
- Unit passed production ATE test.
- Slight crumpling of cardboard inner observed.

Product Code – V607FVH Serial Number – 2051040393

- Unit was taken directly from production line. Unit was compliant with production standards.
- No mechanical damaged observed on unit.
- Unit passed production ATE test.
- Moderate crumpling of cardboard inner observed.

PASS

Date Issued: 08/06/05	Mil 810E Shock Summary Report		~4020038.doc
A.Irwin	Lambda UK Confidential	Rev 1	Page 3 of 4





Procedure VI – Bench Handling

ix Objective

Designed to test the ability of the product to withstand typical bench manual handling during operational / servicing use.

x Test Conditions

- Use a test bench with a thickness of at least 4.25cm
- With unit switched off.
- With the unit sat on its normal side (i.e. with label facing upwards).
- Lift one end of the unit to 100mm above surface of the bench.
- Repeat drop 4 times in total.

xi Analysis of Results

- Conduct visual and functional tests on each sample prior start.
- No mechanical failure / functional non-conformance of product.
- Document the results.

<u>xii Results</u>

Product Code - V607FVH Serial Number - 2051040394

No visible damage observed. Functional Test – PASS.

PASS

Date Issued: 08/06/05	Mil 810E Shock Summary Report		~4020038.doc
A.Irwin	Lambda UK Confidential	Rev 1	Page 4 of 4