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Snap Hook Test Report

P/N: #365



PROPRIETARY & CONFINDENTIAL

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PURPOSE

The purpose of this report is to show the load strength of the snap hook #365 used on the quick strops. Successful completion shall confirm the securing hardware satisfies the requirement of withstanding a load of 5kN without permeant distortion listed in AS/NZS 1891.1:1995, clause 3.3.3. The test shall be conducted at Lifesaving Systems Corp. located in Apollo Beach, Florida.

DESCRIPTION

Stainless steel snap hook used on the #214A and #214A-SAP Quick Strops shown below. The snap hook (#365) attaches the crotch strap to the slide bar hardware located on the lifting straps making a secure and safe connection.



#365



#214A



#214A-SAP

ACRONYMS AND ABBREVIATIONS

LSC: Lifesaving Systems Corp.
P/N: Part Number
kN: Kilonewtons
lbf: Pound-Force

SECTION 1 - SPECIFICATIONS

1.1 Snap Hook

#365
• Material: Stainless Steel • Size: 3-5/32” (80mm) • Thickness: 0.34” (8.6mm) • Working Load Limit: 661lbs (300kg) • Breaking Strength: 2,650lbs (1,202kg)

SECTION 2 – STATIC LOAD TEST

2.1 Objective

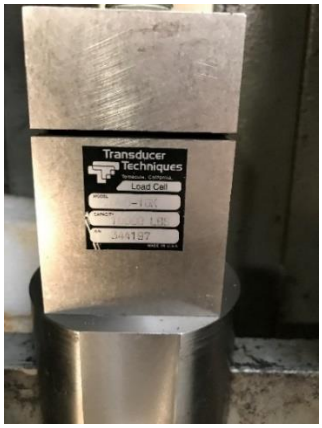
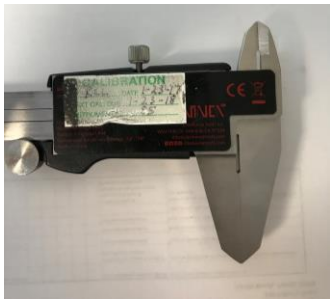
Test the structural integrity of the snap hook by applying a load force of 5kN (1,124lbf) and inspect for permanent distortion.

2.2 Test Equipment

The primary testing equipment consists of the following items:

No.	Test Equipment	Description
1	Hydraulic Pull Tester	Force Application
2	10k S-Beam Load Cell	Force Measurement

2.3 Equipment Calibration

Test Equipment	Description	Calibration Due Date
10k S-Beam Load Cell	Force Measurement	5-18-2018
	• Force Measurement: 10,000lb S-Beam load cell (transducer) with one (I) each 0-10,000lbs.	
Digital Caliper	Dimension Measurement	1-23-2018
	• Measurement: VINCA DCLA-0605 Electronic Digital Caliper.	

2.4 Specimen Identification

Item	Part Number	Part Description	Serial Number
1	365	Snap Hook	71620

2.5 Procedure

a) Select 1 snap hook from a lot to be tested. Record the serial number.

b) Pre-Test: Measure the length of the snap hook and record measurement.

c) Attach one end of the snap hook unto a steel cable on the top grip located inside the hydraulic pull tester. Attach the opposite end of the snap hook unto the bottom steel cable. The snap hook shall be in a vertical orientation inside the pull tester.

d) Increase the force at a rate of 250lbf (1.1kN) every 5 seconds until a maximum limit of 5kN (1,125lbf) has been reached.

e) Release the force and visually inspect the specimen for distortion.

f) Post-Test: Measure the length of the snap hook and record measurement.

g) Record the results as Pass/Fail.

SECTION 3 - RESULTS

3.1 Test Data

Item	Dimensional Measurement (Inches)		Part Number	Serial Number	Material Distortion (Yes/No)
1	Pre-Test	Post-Test	369	71620	NO
	3.329”	3.329”			
 Post-Test: No Distortion					 Load Force (1,151lbf) >5kN

3.2 Summary

(a) Requirement listed in AS/NZS 1891.1-1995, clause 3.3.3.

"Securing buckles and adjusters shall be designed to withstand the loads transmitted as a result of the appropriate assembly test, and, except for those used on pole straps, shall be designed to withstand without permanent distortion, a load of 5kN."

PASS: Snap hook #365 used on the #214A and #214A-SAP quick strops meets the requirement.

The results shall be used to show compliance for ATSO-C1003 authorization.