



#### This MotoCAP safety rating applies to:

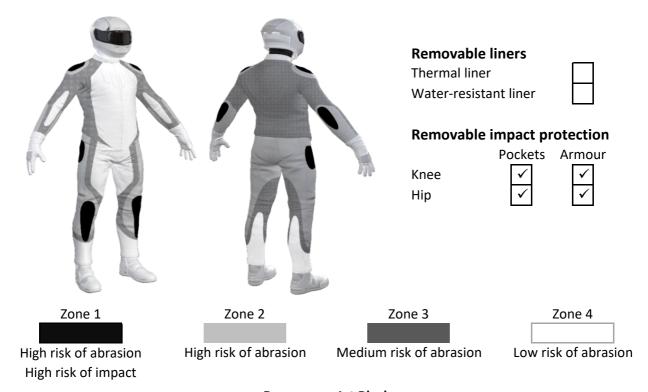
**Brand** Resurgence Model Jet Black Type Pants - Denim Date purchased 9 March 2020 Sizes tested 36 and 40 Test garment gender Male Style All Purpose RRP \$299.00

Test Results Summary	Rating	Score
MotoCAP Protection Rating	**	35.5
Abrasion	3/10	2.21
Burst	10/10	1322
Impact	5/10	37.4
MotoCAP Breathability Rating	***	0.430
Moisture Vapour Resistance	-	33.9
Thermal Resistance	-	0.243
Water resistance	N/A	N/A

This garment is fitted with impact protectors for the knees and hips. There are no vents to allow airflow movement through the garment.

# **Jacket and Pants - Crash Impact Risk Zones**

This diagram is a pictorial representation of the crash impact risk Zones.





#### **Abrasion Resistance**

These pants were tested for abrasion resistance in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely abrasion performance of the materials in each zone calculated from the data in the table below. The colour coding is based on the worst performing material in each zone.



#### **Abrasion Resistance Performance**

Abrasion rating	3/10
Abrasion score	2.21

<b>Determining Criteria</b>	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zones 1 & 2	> 5.6	3.0 - 5.6	1.3 - 2.9	< 1.3
Medium abrasion risk	Zone 3	> 2.5	1.8 - 2.5	0.8 - 1.7	< 0.8
Low abrasion risk	Zone 4	>1.5	1.0 - 1.5	0.4 - 0.9	< 0.4

**Individual Abrasion Resistance Results:** - The table below shows the test results for time to abrade through all layers of the materials. Calculated for each sample by Zone, type and area coverage of each material as a proportion of that Zone. Abrasion times are capped at a maximum of 10.00s.

#### Abrasion time for each test (seconds)

Abiasion time	ioi eacii test (sec	onusj							
Zones 1 & 2	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	100%	3.19	3.20	1.85	2.64	2.25	1.55	2.45	M
Zone 3	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	100%	3.19	3.20	1.85	2.64	2.25	1.55	2.45	A
Zone 4	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	25%	3.19	3.20	1.85	2.64	2.25	1.55	2.45	G
Material B	75%	0.43	0.39	0.30	0.38	0.33		0.37	Р

#### Details of materials used in jacket

Material A Denim fabric shell, aramid fabric layer and mesh inner liner

Material B Denim fabric shell



## **Burst Strength**

These pants were tested for burst strength in accordance with MotoCAP test protocols. The diagram below illustrates the burst strength results in terms of the likely performance of the garment in an impact and is a pictorial representation of the data from the table below.



## **Burst Strength Performance**

Burst rating	10/10
Burst score	1322

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor
Burst strength	(kPa)	> 1000	800 - 1000	500 - 799	< 500

**Individual Burst Strength Results:** - The table below shows the burst pressure in kilopascals (kPA) for each sample tested by Zone and the average result for each zone.

## Burst pressure for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	1059	1714	1549	1205	1675	968	1362	G
Zones 3 & 4	1131	585	1903	681	1365	1301	1161	G



#### **Impact Protection**

These pants were tested for impact protection and coverage in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table below. The colour coding is based on the worst performing score for average or maximium force for each impact zone. Areas shaded black are not considered for impact protection ratings.



Impact Protection Performance
Impact rating 5/10
Impact score 37.4

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor*
Impact force	(kN)	< 15	15 - 24	25 - 30	> 30

<sup>\*</sup> Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

**Impact Protector Results:** - The table below shows the average and maximum force transmitted through each impact protector type in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Knee		Hip
Average force (kN)	18.5	A	17.9 A
Maximum force (kN)	20.4	A	18.5 A
Coverage of Zone 1 area	110%	<u> </u>	85%
Coverage of Zone after displacement	50%		80%

**Individual Impact Protector Results:** - The table below shows the test results for each strike on individual impact protectors in kilonewtons (kN) and the position of the strike. Individual strike results are capped at a maximum of 50kN.

# Force transfer for each impact strike (kN)

Impact protector type	Knee			Hip		
Strike location	Centre	Mid	Edge	Centre	Mid	Edge
Impact Protector 1	17.0	19.0	16.1	17.9	17.5	18.5
Impact Protector 2	18.1	18.8	19.0	17.5	17.3	18.3
Impact Protector 3	19.5	20.4	18.4	18.2	17.3	18.2



## **Breathability**

These pants were tested for breathability following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

Without removable li	With water-resistant liner				
Breathability rating	***	Breat	N/A		
Breathability score	0.430	Breathability score		N/A	
Moisture Vapour Resis	tance - R <sub>et</sub> (kPa.m²/W)	1	2	Average	
Without removable liners	3	34.5	33.2	33.9	
With water-resistant lines	ſ	N/A	N/A	N/A	
Thermal Resistance - R	R <sub>ct</sub> (K.m²/W)	1	2	Average	
Without removable liners	3	0.242	0.243	0.243	
With water-resistant lines	r	N/A	N/A	N/A	

## Water spray and rain resistance

This pants have not been advertised as water-resistant so has not been tested for water spray and rain resistance.

## **Assessment Details.**

Brand Resurgence

Model Jet Black

Type Pants - Denim

Date purchased 9 March 2020

Tested by AMCAF, Deakin University

Garment test reference P19D14

Rating first published September 2020 Rating updated 2 September 2020