

MOTOCAP

This MotoCAP safety rating applies to:

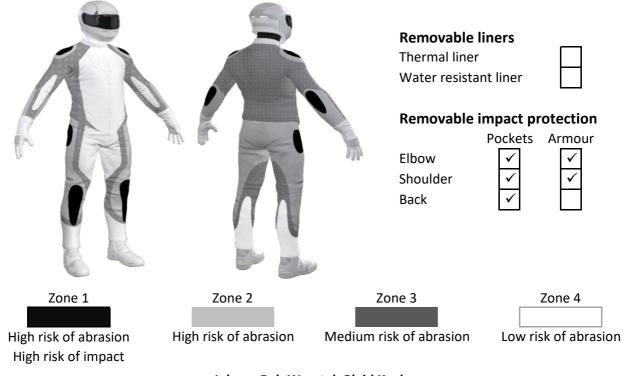
Brand	Johnny Reb
Model	Waratah Plaid Kevlar
Туре	Jacket - Textile
Date purchased	2 March 2022
Sizes tested	L and XL
Test garment gender	Male
Style	All Purpose
RRP	\$209.95

Test Results Summary	Rating	Score
MotoCAP Protection Rating	*	20.9
Abrasion	1/10	1.22
Burst	6/10	611
Impact	4/10	29.1
MotoCAP Breathability Rating	****	0.589
Moisture Vapour Resistance	-	21.1
Thermal Resistance	-	0.207
Water resistance	N/A	N/A

This garment is fitted with impact protectors for the elbows and shoulders. A pocket is provided for an aftermarket back protector. Replacing the elbow armour with higher performing impact protectors would improve the protection levels of this garment. 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.



Johnny Reb Waratah Plaid Kevlar Textile Jacket



Abrasion Resistance

The jacket was 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	1/10
Abrasion score	1.22

Determining Criteria	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zone 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.

Zone 1 & 2	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
Material A	100%	0.81	0.86	1.20	1.81	1.02	1.59	1.22
Zone 3	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	L Average
Material A	100%	0.81	0.86	1.20	1.81	1.02	1.59	1.22
Zone 4	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
Material A	100%	0.81	0.86	1.20	1.81	1.02	1.59	1.22

Details of materials used in jacket

Abrasion time for each test (seconds)

Material A Woven fabric shell, para-aramid fabric layer and mesh inner liner



Burst Strength

The jacket was 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	6/10				
Burst score	611				

Determining Criteria	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.

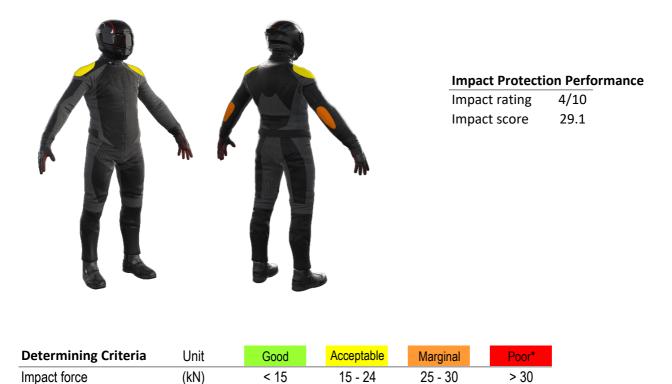
Burst pressure for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	653	616	559	709	514	567	603	Μ
Zones 3 & 4	796	563	542	842	772	349	644	Μ



Impact Protection

The jacket was 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 maximum force for each impact zone. Areas shaded black are not considered for impact protection ratings.



* Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

Individual Impact Protector Results: - The table below shows the test results for each strike on each impact protector in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone. Individual strike results are capped at a maximum of 50kN.

Impact protector type Elbow			Shoulder	
Average force (kN)	24.7	A	18.9	Α
Maximum force (kN)	26.1	М	22.0	Α
Coverage of Zone 1 area	90%		100%	
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	Elbow	Shoulder				
Strike location	Centre	Mid	Edge	Centre	Mid	Edge
Impact Protector 1	23.4	25.7	24.8	15.9	17.7	21.0
Impact Protector 2	24.0	24.1	23.9	17.5	19.1	20.7
Impact Protector 3	26.0	24.0	26.1	18.4	17.8	22.0



Breathability

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

Without removable	With water-resistant liner				
Breathability rating	****	Brea	N/A		
Breathability score 0.589		Brea	N/A		
Moisture Vapour Resi	stance - R _{et} (kPa.m ² /W)	1	2	Average	
Without removable line	rs	21.3	21.0	21.1	
With water-resistant liner		N/A	N/A	N/A	
Thermal Resistance -	R _{ct} (K.m²/W)	1	2	Average	
Without removable line	rs	0.207	0.208	0.207	
With water-resistant line	er	N/A	N/A	N/A	

Water spray and rain resistance

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

Assessment Details.