This MotoCAP safety rating applies to:

Brand:	Harley Davidson
Model:	Trenton
Type:	Jacket - Textile
Date purchased:	9 March 2020
Sizes tested:	L
Gender:	M
Style:	Cruiser
Test code:	J19T38

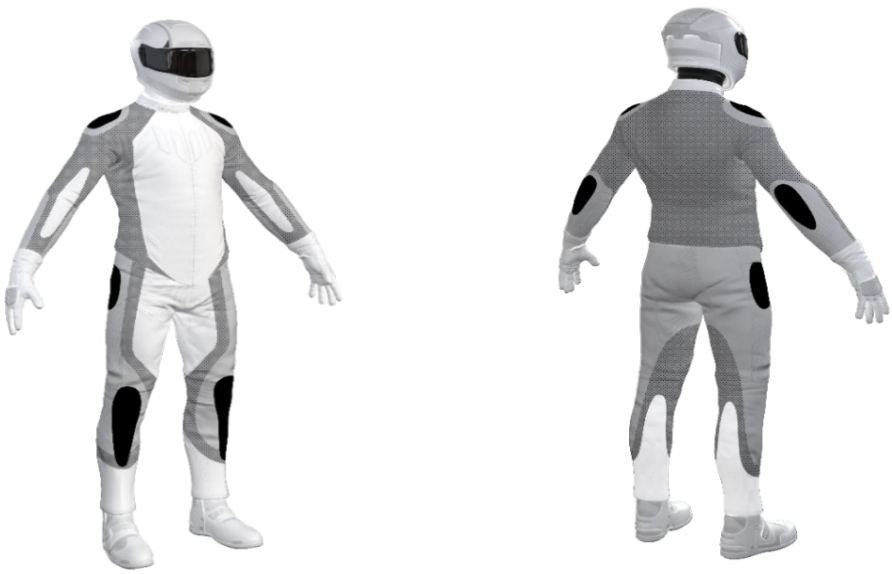
Test Results Summary:

	Rating	Score
MotoCAP Protection Rating	★	12.4
Abrasion	1/10	0.85
Burst	8/10	808
Impact	1/10	0.0
MotoCAP Comfort Rating	★★★	0.415
Moisture Vapour Resistance		29.4
Thermal Resistance		0.203
Water resistance	N/A	N/A

A pocket is provided in the shoulders and elbows for impact protectors to be fitted. There is no pocket provided for an aftermarket back protector. Mesh panels are located in the arms, chest and back 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.



Zone 1	Zone 2	Zone 3	Zone 4
High risk of abrasion High risk of impact	High risk of abrasion	Medium risk of abrasion	Low risk of abrasion

Abrasion Resistance

The garment was tested for abrasion resistance in accordance with MotoCAP test protocols. 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.

Details of materials used in garment:

Material A:	Quilted woven fabric shell with mesh inner liner
Material B:	Mesh fabric shell with mesh inner liner

Zone	Coverage (%)	Abrasion time for each test (seconds) 1	2	3	4	5	6	Average (seconds)	
Zone 1 and 2 areas (High abrasion risk)									
Material A	80%	1.04	0.98	1.24	1.53	1.00	1.19	1.16	P
Material B	20%	0.28	0.20	0.24	0.36	0.34	0.20	0.27	P
Zone 3 area (Medium abrasion risk)									
Material A	100%	1.04	0.98	1.24	1.53	1.00	1.19	1.16	M
Zone 4 area (Low abrasion risk)									
Material A	100%	1.04	0.98	1.24	1.53	1.00	1.19	1.16	A

Abrasion times are capped at a maximum of 10.00s.

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 above. The colour coding is based on the worst performing material in each zone.

Determining Criteria		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

Burst Strength

The garment's burst strength was tested in accordance with MotoCAP test protocols. 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 (kPA)

Area	1	2	3	4	5	Average	
Zones 1 & 2	1156	676	1504	764	776	975	A
Zone EZ	647	1010	764	568	621	722	M
Zones 3 & 4	569	913	567	493	683	645	M

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 above.

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

Impact Protection

This garment was not tested for impact protection as impact protectors were not provided with the garment. 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.

Impact protector type	Elbow	Shoulder
Average force (kN)	P	P
Maximum force (kN)	P	P
Coverage of zone 1 area	0%	0%
Coverage of zone after displacement	0%	0%

Individual test results

Impact force (kN)	Elbow	No impact protector present		Shoulder	No impact protector present	
Strike location	**A**	**B**	**C**	**A**	**B**	**C**
Impact Protector 1						
Impact Protector 2						
Impact Protector 3						

The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table above. The colour coding is based on the worst performing score for average or maximium force for each impact zone.

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

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

Areas shaded black are not considered in the impact protection ratings.

Thermal comfort

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

	1	2	**Average**
Moisture Vapour Resistance - R_{et} ($kPam^2/W$)	29.0	29.7	29.4

	1	2	**Average**
Thermal Resistance - R_{ct} (Km^2/W)	0.199	0.208	0.203

Water spray and rain resistance

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