

## 13 Autobody Repair

### WorldSkills Standards Specification

Section	WSSS Marks
1	Work organization and management and communication and interpersonal skills
2	Diagnosis and correction
3	Replace necessary welded on parts/panels
4	Remove, re-install or replace, and align exterior and/or interior parts and panels
5	Operate and/or manipulate any tools or equipment necessary to perform autobody repairs
6	Cosmetic repair of plastic non-structural components

### Criteria

ID	Name
A	Diagnosis and Correction
B	Structural Part(s) Replacement
C	Non-Structural Part(s) Replacement

D	Panel Repair
E	Aluminum Repair
F	Plastic Repair
G	
H	
I	

Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
A1	DIAGNOSIS: SET-UP, MEASURE, AND REPORT	Any	M	Alignment clamps installed according to equipment maker's reco	
			M	Measuring bridge / ladder installed / fitted	
			M	Measuring bridge / ladder is correctly locked / torqued	
			M	Right - Point # 21R	
			M	Left - Point # 21L	
			M	Right - Point # 13R	
			M	Left - Point # 13L	
			M	Left - Point # 10L	
			M	Right - Point # 1R	
			M	Left - Point # 1L	
			M	Right - Point # 2R	
			M	Left - Point # 2L	
			M	Right - Point #3R	
			M	Left - Point # 3L	
			M	Right - Point #4R	
			M	Left - Point # 4L	
			M	Right - Point #7R	
			M	Left - Point #7L	
			M	Right - Point #8R	

				M	Left - Point #8L	
				M	Right - Point #18R	
				M	Left - Point #18L	
				M	Upper -Point #HL1	
				M	Upper -Point #HR1	
				M	Upper -Point #HL3	
				M	Upper -Point #HR3	
				M	Upper -Point #HL4	
				M	Upper -Point #HR4	
				M	Report damage-produce datasheet	
				J	Equipment set-up for correctional pulls (EVO)	
						0
						1
						2
						3
A2	CORRECTION: REPAIR AND REALIGN STRUCTURE	Any		M	All LH rail points within tolerance $\pm 2\text{mm}$ at A2 STOP yes or no	
				M	Right - Point # 1R (checked at the end of competition)	
				M	Left - Point # 1L (checked at the end of competition)	
				M	Right - Point # 2R (checked at the end of competition)	
				M	Left - Point # 2L (checked at the end of competition)	
				M	Right - Point #3R (checked at the end of competition)	
				M	Left - Point #3L (checked at the end of competition)	
				M	Right - Point #4R (checked at the end of competition)	
				M	Left - Point #4L (checked at the end of competition)	
				M	Right - Point #7R (checked at the end of competition)	
				M	Left - Point #7L (checked at the end of competition)	
				M	Right - Point #8R (checked at the end of competition)	
				M	Left - Point #8L (checked at the end of competition)	
				M	Upper -Point #HL1 (checked at the end of competition)	
				M	Upper -Point #HR1 (checked at the end of competition)	
				M	Upper -Point #HL3 (checked at the end of competition)	
				M	Upper -Point #HR3 (checked at the end of competition)	
				M	No damage or distortion to parts not being replaced	
				M	No spark or other damage to measuring bridge or slide	
				M	Correct use of _Car-O-Liner X3 and EVO_ measuring system	

Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
B1	Install replacement panel/part (fit-up)	Any	M	Prepare gap size for welding ( right hand chassis rail)	
			M	Evo used to support the panels	
			M	Mating flanges are prepared for attachment method chosen on c	
			M	Mating flanges are prepared for attachment on replacement parts	
			M	Resistance spot welding – all four flange surfaces	
			M	MIG Butt weld joints – inside and outside of the joint	
			M	MIG Plug weld joints – the first three surfaces (back side not requ	
			M	Welded on parts removed without metal/holes/drill throug remove	
			M	Body flanges, adjacent panels and reinforcements are good	
			M	No distortion and/or weld remnants in spot weld areas and flange	
			M	Body flanges not straightened, adjacent panels and reinforcement	
			M	Sectioning procedure part being cut as per instructions (right Rail	
			M	Holes punched/drilled for plug welding (to the correct diameter sp	
B2	Attachment Methods/welding	Any	M	MIG continuous defects on RH chassis rail (holes, skips, voids, p	
			M	MIG continuous weld height (chassis rail inner/outer)	
			M	MIG continuous weld with good penetration ( marked after compe	
			M	Incorrect placement or number of Mig Plug welds on outer LH ap	
			M	Incorrect placement or number of Mig Plug welds on LH chassis	
			M	Incorrect placement or number of Mig Plug welds on LH wheelh	
			M	Mig Plug weld where the hole hasn't been completely welded (LH	
			M	Mig Plug weld height (x 38 welds on chassis rail only)	
			M	Mig Plug diameter (x 38 welds on chassis rail only)	
			M	Incorrect placed or number of resistance spot welds	
			M	Incorrect placement or number of spot welds on wheelhouse (x 3	
			M	Resistance spot weld which has blown a hole	
			M	Resistance spot weld where metal edge is missing due to “splash	
B3	Grinding and dressing	Any	M	Dress/Grind/Sand all plug welds on apron panel only (x 24 plugs)	
			M	Dress/Grind/Sand plug welds	
			M	Dress/Grind/Sand apron panel surrounding area	
			M	Grind continues weld both sides	
			M	Dress/Grind/Sand rail panel surrounding area	

B4	Panel gaps and alignment	Any	M M M M M M	re-attach bolted on panels front reinforcement beam - bolts are fu Rear outer taillights mounted bolts are fully fitted Gaps between - fender to door LH/RH Gaps between - fender to door LH/RH Weld through primer applied to bare metal in weld sites on car bo re-attach bolted on cross member - bolts are fully fitted	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
C1	PANEL REMOVAL AND PANEL PREP	Any	M M M M M M M M M M M M M M M M M	Remove necessary bolted-on parts for repairs (bag & tag) Welded on parts removed without metal removed from remainin Body flanges, adjacent panels and reinforcements are good No distortion and/or weld remnants in spot weld areas and flange Body flanges, adjacent panels and reinforcements are good Cutlines on the body lower Cutlines on the body upper Cutlines on the body back Holes punched/drilled for plug welding made to the correct diam Mating flanges are prepared for attachment method chosen on ca Mating flanges are prepared for attachment on replacement parts Resistance spot welding – all four flange surfaces MIG Butt weld joints – inside and outside of the joint Perform product specific steps for panel bonding Weld through primer applied to bare metal in weld sites on car bo Weld through primer applied to bare metal in weld sites of replac	
C2	Install replacement panel/part (fit-up)	Any	M M M	Sectioning joint gap-C pillar upper joint gap is within tolerance Sectioning joint gap-C pillar lower joint gap is within tolerance Holes punched/drilled for plug welding	
C3	Attachment Methods	Any	M M M	MIG continuous weld having any of the following defects (holes, s MIG continuous weld exceeding 2 mm high MIG continuous weld with no visible penetration	

C4	Dressing (Grinding/Sanding) of welds	Any	M	Incorrect placement or number of Mig Plug welds	
			M	Mig Plug weld where the hole hasn't been completely welded	
			M	Mig Plug weld height	
			M	Mig Plug diameter (elongation)	
			M	Deductions for each faulty weld, tested at random.	
			M	Incorrect placed or number of resistance spot welds	
			M	Resistance spot weld which has blown a hole	
			M	Wheelarch complete closed/hammered	
			M	Paint edges feathered (sanded with P 120 or finer)	
			J	Dressing (Grinding/Sanding) of upper joint to original contours	
C5	Panel gaps and alignment	Any			0
					1
					2
					3
			J	Dressing (Grinding/Sanding) of lower joint to original contours	0
					1
					2
					3
			J	Dressing (Grinding/Sanding) of Mig plug weld areas are weakened	0
					1
C5	Panel gaps and alignment	Any			2
					3
			M	re-attach bolted on parts - bolts are fully fitted	
			M	Gaps between rear door and rear fender - L	
			M	Align swage/fold lines of replacement for the door L	
			M	No extra damage to left front door left back door and tailgate (De	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
D1	Panel Repair Rear RH quaterpanel	Any	M	Panel has the original contour and shape. No. 1 Template	

			M	Panel has the original contour and shape. No. 2	
			M	Panel has the original contour and shape. No. 3	
			M	Panel has the original contour and shape. No. 4	
			M	Panel has the original contour and shape. No. 5	
			M	Panel has the original contour and shape. No. 6	
			M	Panel has the original contour and shape. No. 7	
			M	No damage due to tools (electrical shrinking, other)	
			M	Metal finish is good	
			M	Panel edge is repaired correctly - shaped	
			J	Panel is smooth - by feel	0 1 2 3
			J	Panel is smooth - by sight	0 1 2 3
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
E1	Alumium repair	Any	M	Panel has the original contour and shape. No. 1 Template	
			M	Panel has the original contour and shape. No. 2	
			M	Panel has the original contour and shape. No. 3	
			M	Panel has the original contour and shape. No. 4	
			M	Panel has the original contour and shape. No. 5	
			M	Panel has the original contour and shape. No. 6	
			M	No damage or scratch out of the repair zone	
			J	Metal finish is good dent No. 1	0 1 2 3

			J	Panel is smooth - by feel dent No. 1	0 1 2 3
			J	Metal finish is good dent No. 2	0 1 2 3
			J	Panel is smooth - by feel dent No. 2	0 1 2 3
			J	Metal finish is good dent No. 3	0 1 2 3
			J	Panel is smooth - by feel dent No. 3	0 1 2 3
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
F1	Plastic Repair - panel preparation	Any	M M M M M M	Cleaning (Patch) Cleaning (Tape) FPRM stress relief on a crack FPRM Crack gap is evenly/smooth (Patch) FPRM sanding (Patch) FPRM sanding (Patch)	



F2	Plastic Repair - Bonding	Any	M	FPRM Crack gap is evenly/smooth (Tape)	0 1 2 3
			M	FPRM sanding (Tape)	
			M	FPRM sanding (Tape)	
			M	FPRM sanding (Tape & Patch)	
			J	FPRM "Dish out" form (Patch)	
			M	FPRM applied properly (inner side) (Tape)	0 1 2 3
			M	FPRM sanding finish P180 (outer side) (Patch)	
			M	FPRM sanding finish P180(outer side) (Tape)	
			M	FPRM Edge Plastic-FPRM is good (Patch)	
			M	FPRM Edge Plastic-FPRM is good (Tape)	
			M	FPRM Sanding defects (Patch)	
			M	FPRM Sanding defects (Patch)	
			M	FPRM Sanding defects (Tape)	
			M	FPRM Sanding defects (Tape)	
			M	Crash test: bend to 90 degrees (after 24hr) (Patch)	
			M	Crash test: bend to 90 degrees (after 24hr) (Tape)	0 1 2 3
			J	FPRM Surface shape (Patch)	
			J	FPRM Surface shape (Tape)	
			J	FPRM Sanding area (Tape)	0 1 2 3
			J	FPRM Sanding area (Patch)	
			J	FPRM Sanding area (Patch)	
					0 1

					2 3
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
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ification			
	WSSS Marks	Aspect Marks	Variation
	10.00	9.90	0.10
	20.00	20.00	0.00
	34.00	33.00	1.00
	10.00	10.10	0.10
	14.00	14.50	0.50
	12.00	12.50	0.50
Total Variation			2.20

Mark
15.00
30.00
25.00

	10.00
	10.00
	10.00

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.20 for each bolt missing or without correct torque	_100_ Nm (min)	2		0.40
Deduct 0.25 if measuring bridge is incorrectly installed / fit	Yes/No	2		0.15
Deduct 0.15 if measuring bridge lock is incorrectly torqued	Min 5 Nm	2		0.15
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.1 for each incorrect length, width or height, report	tolerance:±2mm	2		0.30
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21
Deduct 0.07 for each incorrect length, width or height, report	tolerance:±2mm	2		0.21

Criterion A      Total Mark      15.00

Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±2mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±6mm	2	0.21
Deduct 0.07 for each incorrect length, width or height, report tolerance:±6mm	2	0.21
Deduct 0.40 for each not done Yes/No	2	1.00
	2	1.00
Create report using X3, didn't anchor body shell (1 rear/1 front)		
Create report using X3, anchored body shell (1 rear/1 front)		
Create report using X3, anchored body shell (1 rear/1 front)		
Create report using X3, anchored body shell (1 rear/1 front)		
Deduct all points if no tolerance:±2mm	2	1.00
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.10 for each incorrect length, width or height, report tolerance:±2mm	2	0.30
Deduct 0.4 for each damage Yes/No	2	0.20
Deduct 0.50 for each damage Yes/No	2	0.30
Deduct 0.2 for each question, operation mistake, and/or in Yes/No	2	0.30

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.2 for each starting 10mm incorrect gap size as measured	Yes/No	4		2.00
Deduct 0.4 if not used	Yes/No	1		0.40
Deduct 0.1 for each starting 50mm where coating is not removed	Yes/No	1		1.00
Deduct 0.1 for each starting 50mm where coating is not removed	Yes/No	1		1.00
Deduct 0.1 for each starting 50mm where coating is not removed	Yes/No	1		0.50
Deduct 0.1 for each starting 50mm where coating is not removed	Yes/No	1		0.50
Deduct 0.1 for each starting 50mm where coating is not removed	Yes/No	1		0.50
Deduct 0.2 for each weld area of metal removed/hole from panel	Yes/No	3		0.80
Deduct 0.2 for each 5mm damage/cuts to panel	Yes/No	3		0.60
Deduct 0.1 for each spot weld not ground level or too deep	Yes/No	3		0.80
Deduct 0.1 for each 25mm not straightened	Yes/No	3		0.50
Deduct 0.5 for each measurements out of tolerance	tolerance:±.2mm	1		2.00
Deduct 0.1 for diameter smaller than (8mm and 10 mm) weld	Yes/No	3		1.00
Deduct 0.2 for each defect weld, such as pinhole, undercut		4		1.00
Deduct 0.2 for each starting 5mm weld exceeding 2mm high		4		1.00
Deduct 0.1 for each 5mm weld not fully penetrated		4		1.00
Deduct 0.2 for each weld incorrectly placed or number.		1		1.00
Deduct 0.2 for each weld incorrectly placed or number.		1		1.00
Deduct 0.2 for each weld incorrectly placed or number.		1		1.00
Deduct 0.1 for each 2mm of missing weld or not fully welded		4		1.00
Deduct 0.1 for each weld exceeding 2mm high		4		1.00
Deduct 0.1 for diameter larger than 1 1/2 times hole size		4		1.00
Deduct 0.1 for each weld incorrectly placed or number.		1		0.50
Deduct 0.2 for each weld incorrectly placed or number.		1		0.50
Deduct 0.1 for each spot weld burn through or metal is missing		4		0.50
Deduct 0.1 for each weld not fully welded		4		0.50
Deduct 0.2 for each weld ground too deep or not enough.		3		1.00
Deduct 0.2 for each defect weld, such as pinhole, undercut	Weld Defect	3		0.40
Deduct 0.1 for each starting 50mm not sanded and out feed		3		1.00
Deduct 0.2 for each starting 5mm ground too deep or not enough		3		1.00
Deduct 0.1 for each starting 50mm not sanded and out feed		3		1.00

Criterion B      Total Mark      30.00

Deduct 0.1 for each missing or loose bolt, clip or pin	min 7 Nm	2		0.50
yes/no deduct all marks if no		3		0.50
Deduct 0.2 for each swage line out of tolerance	1mm +/-	2		0.50
Deduct 0.2 for each point out of tolerance - height & width	4.0mm +/-0.5	2		0.50
Deduct 0.1 for each part without primer application	yes/no	3		0.50
Deduct 0.1 for each missing or loose bolt	yes/no	2		0.50
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.1 for each mistake performed	Yes/No	4		0.30
Deduct 0.2 for each weld area of metal removed from rem	yes/No	3		0.80
Deduct 0.2 for each 5mm damage/cut to panel	Yes/No	3		0.80
Deduct 0.2 for each spot weld remnant not ground level or	Yes/No	3		0.80
Deduct 0.2 for each 25mm not straightened	Yes/No	3		0.80
Deduct 0.2 for each 1mm for incorrect position	tolerance: ± 1.0mm	3		0.90
Deduct 0.2 for each 1mm for incorrect position	tolerance: ± 1.0mm	3		0.90
Deduct 0.2 for each 1mm for incorrect position	tolerance: ± 1.0mm	3		0.90
Deduct 0.1 for diameter smaller or bigger than 6mm	tolerance: ± 0.5mm	3		0.40
	Yes/No	3		0.40
	Yes/No	3		0.40
	Yes/No	3		0.40
Deduct 0.1 for each 50mm area where coatings are not re	Yes/No	3		0.40
Deduct 0.2 for each 50mm area not properly prepped	Yes/No	3		0.80
Deduct 0.1 for each part without primer application	.1 for ea 5mm	3		0.50
Deduct 0.1 for each part without primer application	Yes/No	3		0.50
Deduct 0.1 for each 5mm of joint outside of tolerance	0-1 mm	3		0.40
Deduct 0.1 for each 5mm of joint outside of tolerance	0-1 mm	3		0.40
Deduct 0.2 for each with wrong number	Yes/No	3		0.40
Deduct 0.2 for each defect weld, such as pinhole, undercu	for ea. occurrence	3		0.60
Deduct 0.1 for each weld exceeding 2mm high	for ea. occurrence	3		0.80
Deduct 0.2 for each 5mm weld not fully penetrated	for ea. occurrence	3		1.00

Criterion C      Total Mark      25.00

Deduct 0.1 for each weld incorrectly placed or number.	for ea. occurrence	3		0.20
Deduct 0.1 for each 2mm of missing weld or not fully welded	for ea. occurrence	3		0.50
Deduct 0.2 for each weld exceeding 2mm high	for ea. occurrence	3		0.60
Deduct 0.2 for diameter larger than 9mm	for ea. occurrence	3		0.80
deduct 1.0 for failed destructive test	for ea. occurrence	3		0.80
Deduct 0.1 for each weld incorrectly placed or number.	for ea. occurrence	3		0.50
Deduct 0.1 for each spot weld burn through or metal is missing	for ea. occurrence	3		0.80
Deduct 0,1 for each 10mm is not hammered		3		0.50
Deduct 0.1 for each 25mm area not sanded	Yes / No	3		0.70
		3		1.30
Attempted to restore butt joint area to original contour but				
Dressed welds in joint area has the general original contour				
Dressed welds and joint area is good and looks to have the				
Joint area looks to be returned to original contour and shape		3		1.30
Attempted to restore butt joint area to original contour but				
Dressed welds in joint area has the general original contour				
Dressed welds and joint area is good and looks to have the				
Joint area looks to be returned to original contour and shape		3		1.30
flanges have minimal dressing of welds performed toward				
Attempted to restore flanges to original contour but multiple				
Panel flange area is good and looks to have the general o				
Panel flange areas looks to be returned to original contour				
Deduct 0.1 for each missing or loose bolt, clip or pin		4		0.40
Deduct 0.2 for each point out of tolerance - height & width	3,5mm +/-1,0	4		0.40
Deduct 0.2 for each incorrect line not within tolerance	for ea. occurrence	3		0.80
Deduct 0.1 for each 10mm damage to panel	Yes / No	3		0.50
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: ±1mm	5		1.00

Criterion D      Total Mark      10.00



Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		0.80
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		0.80
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		0.50
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.50
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.50
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		0.40
Deduct 0.1 for each dent or hole	Yes/No	5		0.50
Deduct 0.1 for each 50 mm square not sanded	P120	5		0.50
too high or too low	Yes/No	5		0.50
		5		1.00
Damaged area has been partially restored to original shape				
Repaired area looks to have the general original contour and				
Repaired area looks to have the original contour and shape				
Repaired area looks to be returned to original contour and				
		5		1.00
Damaged area has been partially restored to original shape				
Repaired area looks to have the general original contour and				
Repaired area looks to have the original contour and shape				
Repaired area looks to be returned to original contour and				
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	2		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	2		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	2		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.00
Deduct 0.1 for every 1 mm exceeding tolerance, damage	tolerance: $\pm 1$ mm	5		1.00
Deduct 0.1 for each dent or hole	Yes/No	5		1.00
		5		0.50
no sanding, more than 4 burning marks				
more than one scratch and not homogeneously (feathered)				
Only one of the following mistakes listed is allowed:- one s				
complete and regular sanding, appropriate zone, no burnin				

Criterion E      Total Mark      10.00

nothing repaired repaired zone is blubbering and has a lot of waves repaired zone 1-2 waves smooth homogeneous surface		6		0.50
no sanding, more than 4 burning marks more than one scratch and not homogeneously (feathered) Only one of the following mistakes listed is allowed:- one s complete and regular sanding, appropriate zone, no burnin		6		0.50
nothing repaired repaired zone is blubbering and has a lot of waves repaired zone 1-2 waves smooth homogeneous surface		6		0.50
no sanding, more than 4 burning marks more than one scratch and not homogeneously (feathered) Only one of the following mistakes listed is allowed:- one s complete and regular sanding, appropriate zone, no burnin		6		0.50
nothing repaired repaired zone is blubbering and has a lot of waves repaired zone 1-2 waves smooth homogeneous surface		6		0.50
nothing repaired repaired zone is blubbering and has a lot of waves repaired zone 1-2 waves smooth homogeneous surface		6		0.50
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Cleaned entire repair area	Yes/No	6		0.10
Cleaned entire repair area	Yes/No	6		0.10
Deduct all marks if no hole or hole size is bigger or smaller	3-6 mm	6		0.20
Deduct 0,1 of each 40 mm with gap less 0,5 and more 1,5	0,5-1,5 mm	6		0.30
Deduct 0,1 of each 25x25 mm with not good finish	template 25x25mm	6		0.20
Deduct 0,1 of each 5x5 mm area of melted plastic	template 5x5mm	6		0.30

Criterion F      Total Mark      10.00

Deduct 0,1 of each 40 mm with gap less 0,5 and more 1,5	0,5-1,5 mm	6	0.20
Deduct 0,1 of each 25x25 mm with not good finish	template 25x25mm	6	0.30
Deduct 0,1 of each 5x5 mm area of melted plastic	template 5x5mm	6	0.30
Deduct all marks if any accidental damages	Yes/No	6	0.40
		6	0.60
"Dish out": NO or too narrow,Accidental damages(holes, o			
"Dish out": Yes, 10-30 mm but not evenly/smooth,Acciden			
"Dish out": Yes, 10-20 mm and evenly/smooth,Accidental o			
"Dish out": Yes, 10-15 mm and evenly/smooth,Accidental o			
Deduct 0,1 for each 10 mm where FPRM applied on non s	10 mm	6	0.20
Deduct 0,1 for any mistake (scratch...)	scratch etc.	6	0.20
Deduct 0,1 for any mistake (scratch...)	scratch etc.	6	0.20
Deduct 0,1 for each 15 mm of exfoliation	each 15 mm	6	0.20
Deduct 0,1 for each 15 mm of exfoliation	each 15 mm	6	0.20
Deduct 0.1 for each 10 mm of deep scratch or other dama	each 10 mm	6	0.20
Deduct 0.1 for each 10 mm where plastic is melted by the	each 10 mm	6	0.40
Deduct 0.1 for each 10 mm of deep scratch or other dama	each 10 mm	6	0.20
Deduct 0.1 for each 10 mm where plastic is melted by the	each 10 mm	6	0.40
Deduct all points if any layers are coming out or material o	Y/N	6	1.50
Deduct all points if any layers are coming out or material o	Y/N	6	1.50
		6	0.60
The surface does not have an original contour. pores / dip			
Pores / dips, roughness less than 1 mm; the surface has a			
No pores and dips, the surface has an original contour and			
No pores and dips, the surface has an original contour and			
		6	0.60
The surface does not have an original contour. pores / dip			
Pores / dips, roughness less than 1 mm; the surface has a			
No pores and dips, the surface has an original contour and			
No pores and dips, the surface has an original contour and			
		6	0.30
The sanding area is not sufficient, FPRM is applied compl			
the sanding area is more than 150 mm, FPRM applied onl			
the sanding area is less than 150 mm, FPRM applied only			
the sanding area is less than 75 mm, FPRM applied only c			
		6	0.30
The sanding area is not sufficient, FPRM is applied compl			
the sanding area is more than 150 mm, FPRM applied onl			

the sanding area is less than 150 mm, FPRM applied only  
the sanding area is less than 75 mm, FPRM applied only

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark

Criterion G      Total Mark      0.00

Criterion H      Total Mark      0.00

Criterion I      Total Mark      0.00

Competition      Total Mark      100.00