

## Paint Refinishing Times

Tidjen voor overspuiten

Temps de réparation de la peinture

Zeiten für Lackarbeiten

Tempi delle rifintura verniciatura

Tiempos de repintado

Tempos de repintura

# **NEW PUBLICATION INTRODUCTION**

## PAINT REFINISHING REPAIR TIMES

Publication Numbers: RCL 0313ENG, RCL 0345ENG, RCL 0346ENG, RCL 0347ENG, RCL 0348ENG, RCL 0349ENG,RCL 0350ENG, RCL 0351ENG AND RCL 0352ENG

Amendment Number: GEN 005.99

DATE: 10/99

Please find enclosed copies of the new paint refinishing times schedules for all Rover Cars, Mini and MG products.

It has been necessary to reissue these publications to allow publication on the RAVE CD. We have also taken this opportunity to commonise descriptions and panel names across all models.

The existing paint refinishing times schedule must be retained for use with vehicles not covered by the issue of these new publications.

Further stocks of these new paint refinishing times schedules available through the normal parts ordering process.

RCL 0345ENG - MINI

RCL 0352ENG - MGF

RCL 0346ENG - Rover 100

RCL 0347ENG - Rover 200 (RF)

RCL 0348ENG - Rover 400 (RT)

RCL 0349ENG - Rover 200/400 (XW)

RCL 0350ENG - Rover 600 (RH)

RCL 0351ENG - Rover 800 (RS)

RCL 0313ENG - Rover 75 (RJ)





# MINI

# PAINT REFINISHING

# **TIMES**

ROOFS AND HARD TOPS	79-A
BONNETS	79-B
SCUTTLES	79-C
BOOT LID	79-D
DOORS	79-E
WINGS AND ROAD WHEELS	79-F
BODY PANELS	79-G
SURROUND PANELS	79-H
BUMPERS AND LOWER PANELS	79-J
WINDOW AND SCREEN FRAMES	79-K
SILL PANELS	79-L
COMPLETE VEHICLE	79-M
APERTURES	79-N
INTERIOR BONNET PANEL	79-Q
INTERIOR BOOT PANEL	79-R
INTERIOR DOORS	79-S
INTERIOR ENGINE COMPARTMENT	79-V
INTERIOR LOAD SPACE	79-W

Part Number RCL 0345ENG Effective Date: 07/1999

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#### INTRODUCTION

#### **TIMES**

All operation times are given in DECIMAL HOURS.

The times listed in this publication are the result of a careful study of the operations concerned and reflect the time required to complete high-quality paint repair operations and include:

- \* Driving the vehicle to and from the preparation and spray areas.
- \* Obtaining materials, equipment and parts.
- \* Masking, spraying, buffing, flatting, machine sanding/chemical stripping and other operations appropriate to the refinish process.
- \* Removal and refitting of essential trim/finishers, etc. (see note)
- \* Time allowance for the personal needs of the operator, fatigue; and for reasonable variations in operator speed and skill.

#### Note:

For convenience, where separate bonus systems are operated, the time that has been included for the removal and refitting of trim etc., is shown in italics beneath the operation time concerned AND MUST NOT BE ADDED TO IT. These allowances differ from those listed in Repair Operation Times as they relate to removal of components in the most convenient form rather than the condition in which they are normally serviced. The drive in/out time is included in the paint constant allowance, and not in these times.

#### **CONSTANT ALLOWANCES**

The constant allowance for each type of repair process is shown immediately under the process description at the top of the times columns and at the bottom of the page. This constant is derived from those parts of the process time allowance which remains constant. Only one constant time, the highest from those processes used, must be included in the total time when calculating allowances for repairs involving more than one panel or process.

#### **VARIABLE ALLOWANCES**

Where no time allowance appears in the time column, i.e. repairs to engine compartment panels, use local repair allowances. With the exception of refinishing process 8 - Local strip, all other processes are complete and no further supplementary time allowance must be included. Local strip - process 8 - will normally be supplemented by the time allowance for Flat and repaint - process 2.

## **Complete Panels**

The times listed against the operation number under the process headings at the top of the page vary according to the size of the panel.

#### **Local Repairs**

Local repairs are defined as a repair area of approximately 15 inches x 15 inches. (36cm x 36cm) Time allowances for local repairs are shown at the bottom of the page as a plus allowance to the constant and may be claimed for each local repair undertaken.

Where it is necessary to carry out local repairs on more than one sub area of a panel and the individual times exceed that given for the complete panel, the complete panel time must be used. This also applies to part panels.

#### **MATERIALS ALLOWANCE**

Refer to the instructions and charts in the rear of this publication.

#### WARRANTY

Procedures for the submission of warranty claims and guidance on the use of the revised Complaint Codes introduced with the Paint Refinishing Times will be found in the Warranty Policy and Procedures Manual.

#### **NUMBERING**

Is comprised of six digits and letters, e.g. 76DAA1.

79 = Paint Refinishing Operation

79D = Panel Concerned

79DA = Location of panel, e.g. right hand/left hand, front/rear.

79DAA = Extent/location of panel refinished. e.g. complete, top, centre, lower, edge, etc.

79DAA1 = Refinishing process, e.g. Strip and repaint.

#### **REFINISHING PROCESS**

Nine different types of refinishing processes are covered and are identified by the number appearing above the columns of times or at the bottom of each page.

#### **Complete Panels**

Process 1 - Strip and Repaint, allows for the panel to be stripped to bare metal and refinished using the current refinish systems. The constant allowance for a strip repair is 2.40 hours.

Process 2 - Flat and Repaint, allows for a repair of the colour or base coat.

(Note:) An allowance is included to allow for priming of the panel where a heavy flat repair is required. The constant allowance for a flat repair is 1.00 hour.

Process 4 - Flat, Compound and Polish, Allows for the panel to be lightly flatted to remove any imperfections or dirt inclusion and the application of a compound and final polish. The constant allowance for a flat compound and polish is 0.40 hours.

Process 5 - Compound and polish, Allows for the application of a compound and final polish. The constant allowance for a compound and polish is 0.35 hours.

## **Local Repairs**

Process 3 - Local repaint, allows for a repair of the colour or base coat, where the repair can be completed without the need to repaint the complete panel. The constant allowance for a local repair is 0.70 hours.

(Note:) An allowance is included to allow for priming of the panel where a heavy flat repair is required.

Process 8 - Local strip. This process should be used in conjunction with process 2 or 3 where a small area of the panel requires stripping to bare metal to complete the repair. No constant allowance is associated with a local strip as it is always claimed along with either process 2 or 3.

Process 9 - Local colour, full lacquer. This process allows for a repair of the colour or base coat, where the repair can be completed without the need to repaint the complete panel. After the colour repair is complete, the process allows for the complete panel to have clear coat lacquer applied. (Note:) An allowance is included to allow for priming of the panel where a heavy flat repair is required.

## **CALCULATING A PAINT REPAIR TIME**

The following examples will assist in calculating paint refinishing time allowances. For details on how warranty claims should be completed. See Warranty Policies and Procedures Manual.

Complete Panels - Single Panels OnlyIdentify the panel and refinish process. e.g.79ECA1 Door Front - LH - Panel - Complete - Strip and Repaint
Complete Panels - Two or More Identify the panels and refinish processes. e.g. 79ECA1 Door, Front - LH - Panel - Complete - Strip and Repaint
Local Repairs - Single PanelIdentify the panel and refinish process, e.g= 0.35 hours79ECA3 = Door, Front - LH - Local Respray= 0.35 hoursLocal Respray - Constant 3= 0.70 hoursTotal allowance 79ECA3= 1.05 hours
Local Repairs - Two or moreIdentify panels and refinish processes. e.g.79ECA3 Door, Front - LH -Local Respray= 0.35 hours79AAA6 Roof panel - Local compound and polish= 0.05 hours79BAA7 Bonnet - Touch-in (brush)= 0.05 hoursAdd the highest constant for the for the process undertaken, i.e. Local respray= 0.70 hoursTotal allowance 79ECA3, 79AAA6 AND 79BAA7= 1.15 hours
If it is necessary to complete two or more of the same processes on a panel, the following example should be followed: Identify panel and refinish process: e.g. 79AAA6 Roof panel - Local compound and polish. Number of repairs $(3) = 3 \times 0.05$
Local Strip Repairs - One or more  This process will normally be accompanied by a Flat and Repaint of the complete panel. e.g.  Roof panel - Local strip 79AAA8

If more than one local strip is completed on the same panel, add the Local strip repair allowance (79AAA8) for each additional repair completed.

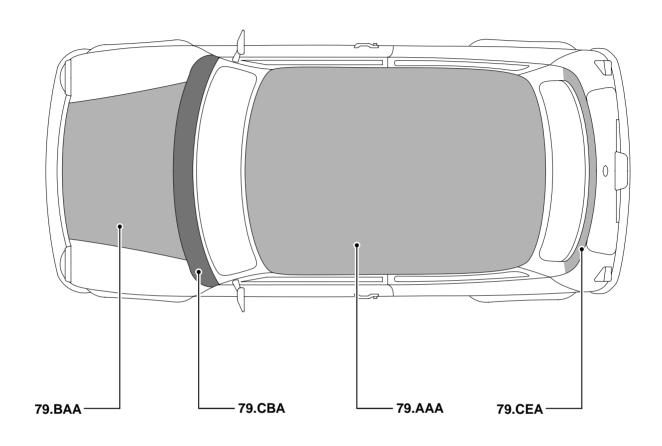
NOTE The labour time allowances shown in this publication are for rectification of solid colours.

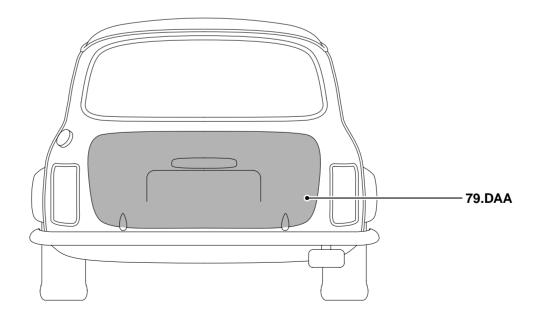
## **CLEAR OVER BASE (C.O.B) COLOURS**

The increased labour times are applicable to refinishing processes 1, 2, 3 and 9, and can be established by applying a percentage uplift to the current published times as follows:-

- \* Refinishing Process 1 Strip & repaint the increase is 8%
- \* Refinishing Process 2 Flat & repaint the increase is 15%
- \* Refinishing process 3 Local respray the increase is 15%
- \* Refinishing process 9 Local colour full lacquer the increase is 15%

The other paint refinishing processes remain unchanged.

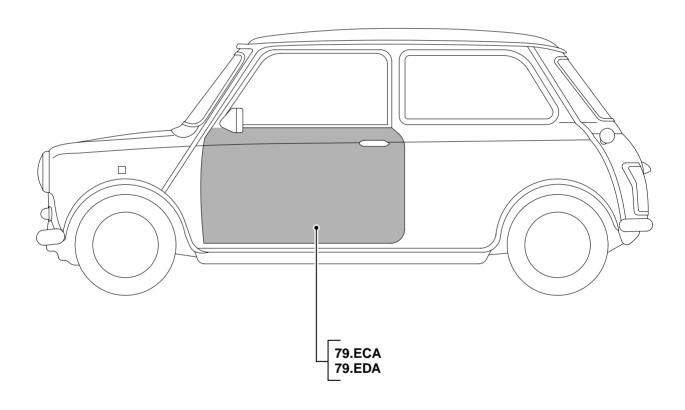




		Strip	Flat	Flat	Compound	d Local
		and	and	compound	and	colour, full
	Process description	_ repaint	repaint	and polish	polish	lacquer
	Process number	_ 1	2	4	5	9
	Constant allowance	2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79A-	ROOFS AND HARD TOPS						
79.AAA	Roof panel - complete	F	3.70 <i>0.20</i>	2.55 0.20	0.95	0.30	0.85 <i>0.20</i>
79B-	BONNETS						
79.BAA	Bonnet panel - complete	С	1.70 <i>0.20</i>	1.00 <i>0.20</i>	0.35	0.10	0.60 <i>0.20</i>
79C-	SCUTTLES						
79.CBA	Scuttle - front - complete	Α	1.40 <i>0.20</i>	0.45 <i>0.20</i>	0.10	0.05	0.45 <i>0.20</i>
79.CEA	Scuttle - rear - complete	Α	0.80 <i>0.15</i>	0.40 <i>0.15</i>	0.05	0.05	0.40 <i>0.15</i>
79D-	BOOT LIDS						
79.DAA	Boot lid/tailgate panel - complete	С	1.55 <i>0.35</i>	0.85 <i>0.3</i> 5	0.20	0.05	0.70 <i>0.35</i>

1		
	Local	Local
Process description	respray	strip
Process number	_ 3	8
Constant allowance	0.70	0.00
Allowance per repair	0.35	0.35

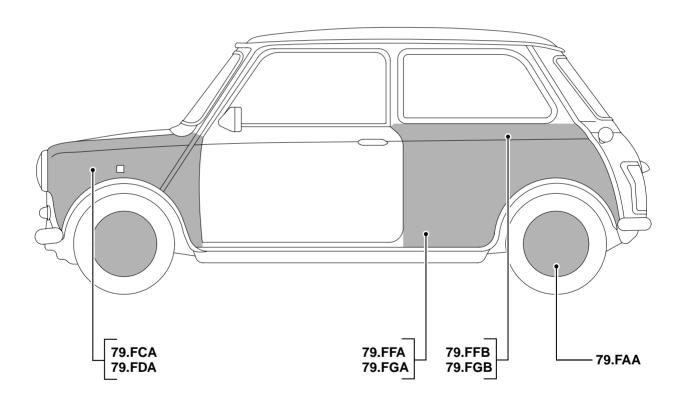


PAINT REFINISHING MINI

		Strip	Flat	Flat (	Compound	d Local
		and	and	compound	and	colour, full
	Process description	. repaint	repaint	and polish	polish	lacquer
	Process number	. 1	2	4	5	9
	Constant allowance	2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79E DOORS

79.ECA	Door panel - front - LH - complete	С	1.80 <i>0.50</i>	1.15 <i>0.50</i>	0.30	0.10	0.85 0.50
79.EDA	Door panel - front - RH - complete	С	1.80 0.50	1.15 0.50	0.30	0.10	0.85 0.50

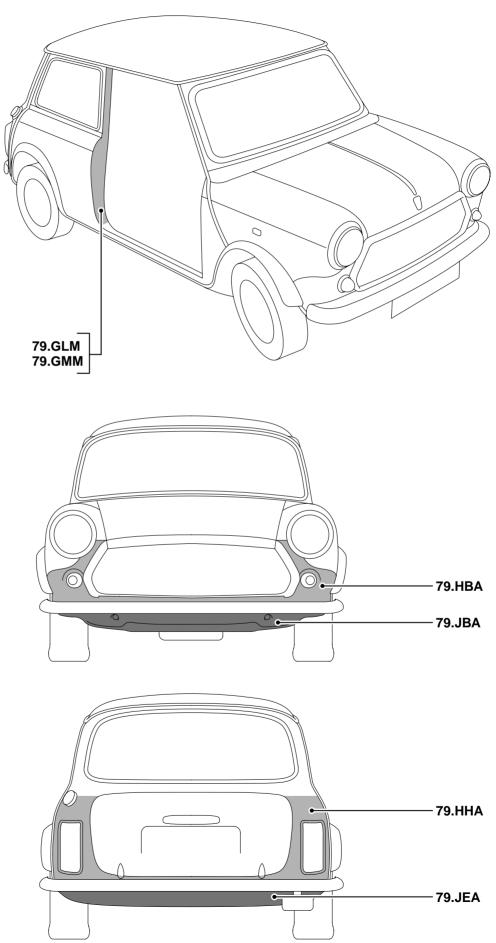


PAINT REFINISHING MINI

		Strip	Flat	Flat	Compound	d Local
		and	and	compound	and	colour, full
	Process description	_ repaint	repaint	and polish	polish	lacquer
	Process number	_ 1	2	4	5	9
	Constant allowance	_ 2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79F	WINGS AND ROAD WHEELS						
79.FAA	Road wheel - each	Α		0.40	0.05	0.05	
79.FCA	Wing - front - LH - complete	В	1.25 <i>0.20</i>	0.60 <i>0.20</i>	0.15	0.05	0.60 <i>0.20</i>
79.FDA	Wing - front - RH - complete	В	1.25 <i>0.20</i>	0.60 <i>0.20</i>	0.15	0.05	0.60 <i>0.20</i>
79.FFA	Wing - rear - LH - complete	С	1.70 <i>0.30</i>	0.90 <i>0.30</i>	0.25	0.10	0.70 <i>0.30</i>
79.FFB	Wing - rear - LH - top	С	1.70 <i>0.30</i>	0.90 <i>0.30</i>	0.25	0.10	0.70 <i>0.30</i>
79.FGA	Wing - rear - RH - complete	С	1.70 <i>0.30</i>	0.90 <i>0.30</i>	0.25	0.10	0.70 <i>0.30</i>
79.FGB	Wing - rear - RH - top	С	1.70 <i>0.30</i>	0.90 <i>0.30</i>	0.25	0.10	0.70 <i>0.30</i>

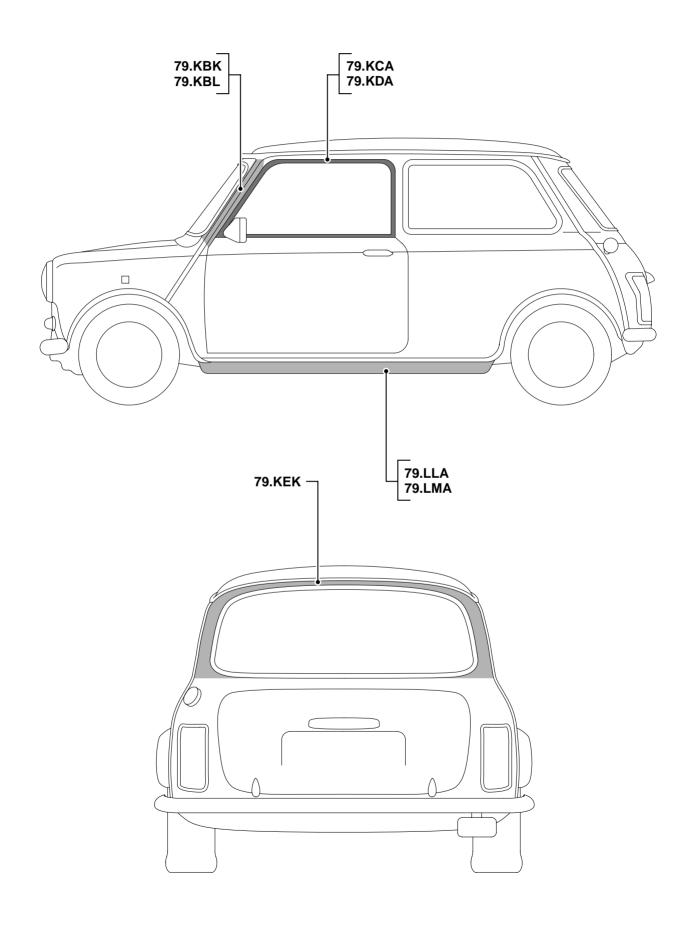
	Local	Local
Process description	respray	strip
Process number	3	8
Constant allowance	0.70	0.00
Allowance per repair	0.35	0.35



		Strip	Flat	Flat	Compound	Local
		and	and	compound	and	colour, full
	Process description	repaint	repaint	and polish	polish	lacquer
	Process number	1	2	4	5	9
	Constant allowance	2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code	¥				

79-G	BODY PANELS						
79-GLM	B/C post - LH - exterior	Α	0.35	0.30	0.05	0.05	0.25
79-GMM	B/C post - RH - exterior	Α	0.35	0.30	0.05	0.05	0.25
79-H	SURROUND PANELS						
79-HBA	Mounting panel - grille - complete	Α	1.65	0.75	0.10	0.05	0.70
79-HHA	Surround - boot lid - complete	В	2.00	1.00	0.15	0.05	0.90
79-J	BUMPERS AND LOWER PANELS						
79-JBA	Lower panel - front - complete	Α	0.95 <i>0.25</i>	0.50 <i>0.25</i>	0.10	0.05	0.45 <i>0.25</i>
79-JEA	Lower panel - rear - complete	Е	1.30 <i>0.3</i> 5	0.75 <i>0.</i> 35	0.15	0.05	0.70 <i>0.</i> 35

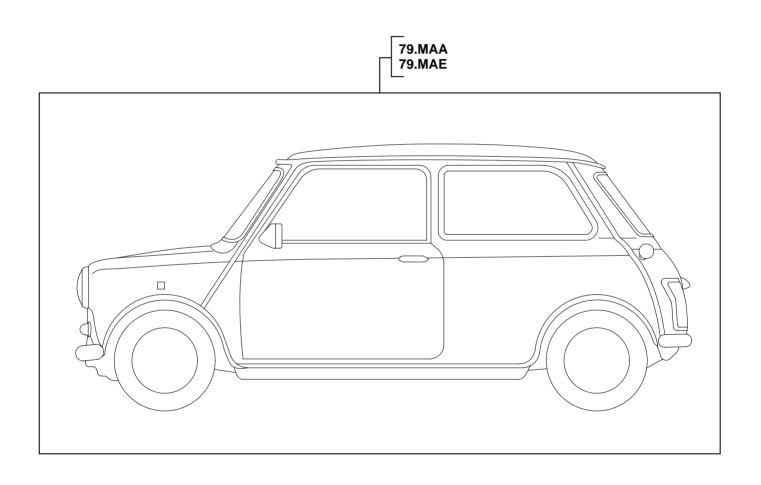
Process description	Local respray	Local strip
Process number	. 3	8
Constant allowance	_ 0.70	0.00
Allowance per repair	_ 0.35	0.35



		Strip	Flat	Flat	Compound	d Local
		and	and	compound	and	colour, full
	Process description	_ repaint	repaint	and polish	polish	lacquer
	Process number	_ 1	2	4	5	9
	Constant allowance	_ 2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79-K	WINDOW AND SCREEN FRAMES						
79-KBK	A post/screen pillar - LH - exterior	Α	0.40 <i>0.0</i> 5	0.30 <i>0.0</i> 5	0.05	0.05	0.20 <i>0.05</i>
79-KBL	A post/screen pillar - RH - exterior	Α	0.40 <i>0.05</i>	0.30 <i>0.05</i>	0.05	0.05	0.20 <i>0.0</i> 5
79-KCA	Window frame - door - front - LH - complete	Α	0.85 <i>0.15</i>	0.40 <i>0.15</i>	0.05	0.05	0.40 <i>0.15</i>
79-KDA	Window frame - door - front - RH - complete	Α	0.85 <i>0.15</i>	0.40 <i>0.15</i>	0.05	0.05	0.40 <i>0.15</i>
79-KEK	Window frame - rear screen - complete	Α	0.45 <i>0.20</i>	0.45 <i>0.20</i>	0.05	0.05	0.40 <i>0.20</i>
79-L	SILLS						
79-LLA	Sill panel - LH - complete	Α	0.60 <i>0.05</i>	0.30 <i>0.0</i> 5	0.05	0.05	0.25 <i>0.05</i>
79-LMA	Sill panel - RH - complete	Α	0.60 <i>0.0</i> 5	0.30 <i>0.0</i> 5	0.05	0.05	0.25 <i>0.0</i> 5

	Local	Local
Process description	respray	strip
Process number	3	8
Constant allowance	0.70	0.00
Allowance per repair	0.35	0.35



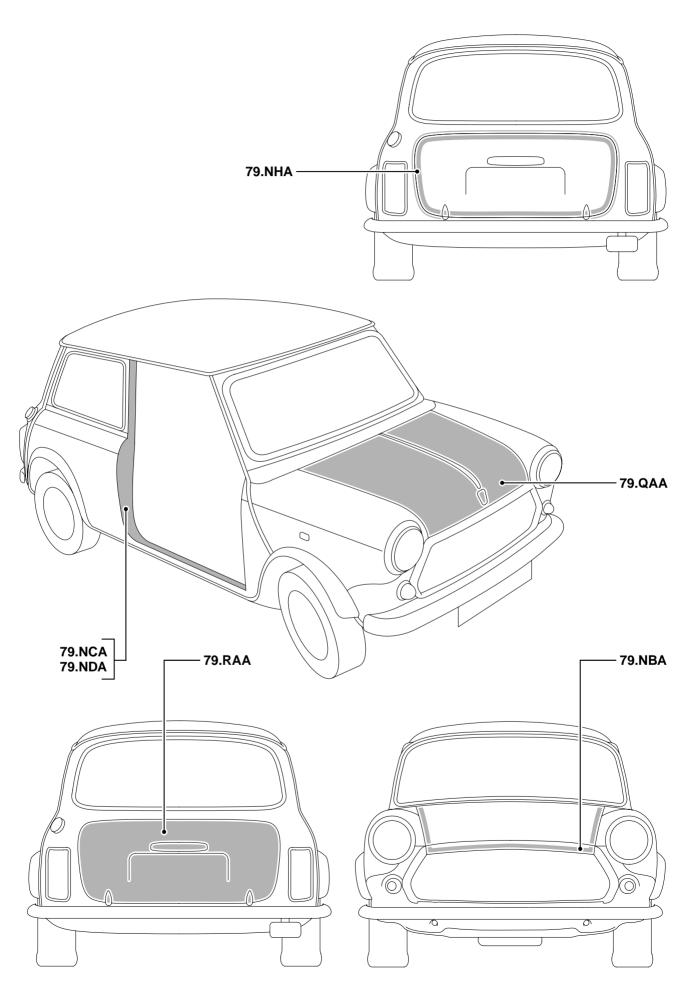
PAINT REFINISHING MINI

		Strip	Flat	Flat	Compound	Local
		anḋ	and	compound	and	colour, full
	Process description	. repaint	repaint	and polish	polish	lacquer
	Process number	. 1	2	4	5	9
	Constant allowance	2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79-IVI	COMPLETE VEHICLE						
79-MA	A All exterior panels - excluding shuts and apertures (with sunroof(s) and/or roofbars fitted)	K	27.70	13.55	3.80	1.20	0.35
		• •	4 40	4 40	0.00	0	4 40

79-MAE	All exterior panels - including shuts and apertures (with sunroof(s) and/or roofbars						
	fitted)	L	37.35 <i>5.70</i>	16.50 <i>5.70</i>	4.50	1.45	0.35 <i>5.70</i>

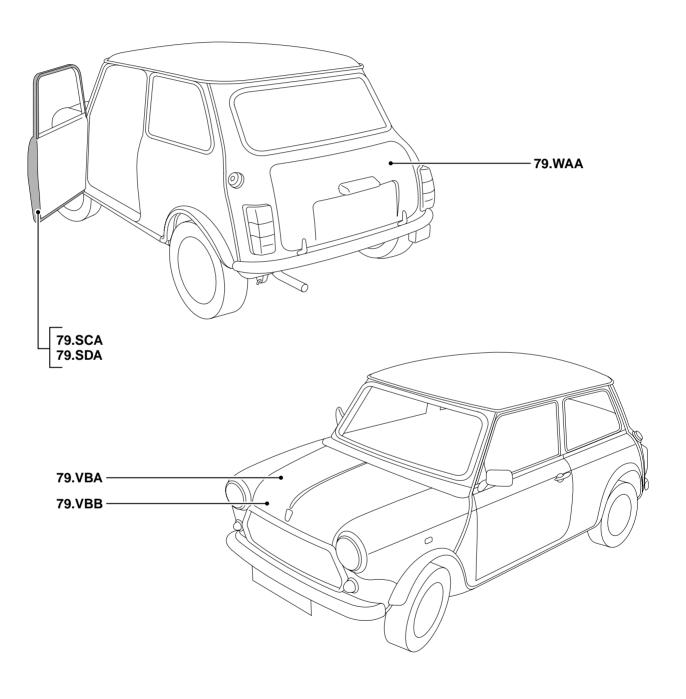
	Local	Local
Process description	respray	strip
Process number	3	8
Constant allowance	0.70	0.00
Allowance per repair	0.35	0.35



		Strip	Flat	Flat (	Compoun	d Local
		and	and	compound	and	colour, full
	Process description	<pre>_ repaint</pre>	repaint	and polish	polish	lacquer
	Process number	_ 1	2	4	5	9
	Constant allowance	_ 2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79-N	APERTURES						
79-NBA	Aperture - bonnet - complete	Α	1.45	0.40	0.10	0.05	0.40
79-NCA	Aperture - door - front - LH - complete	Α	1.45 <i>0.25</i>	0.40 <i>0.25</i>	0.10	0.05	0.40 <i>0.25</i>
79-NDA	Aperture - door - front - RH - complete	Α	1.45 <i>0.25</i>	0.40 <i>0.25</i>	0.10	0.05	0.40 <i>0</i> .25
79-NHA	Aperture - bootlid,tailgate or taildoor - complete	Α	1.20 <i>0.20</i>	0.45 <i>0</i> .20	0.05	0.05	0.40 <i>0.20</i>
79-Q	INTERIOR BONNET PANEL						
79-QAA	Bonnet panel - inner - local repairs only	Α					0.70 <i>0.20</i>
79-R	INTERIOR BOOT LID						
79-RAA	Boot lid, tailgate, taildoor - inner - local repairs only	Α					0.80 <i>0.35</i>

Process description	Local respray	<i>Local</i> strip
Process number	_ 3	8
Constant allowance	0.70	0.00
Allowance per repair	0.35	0.35



		Strip	Flat	Flat	Compound	
		and	and	compound	and	colour, full
	Process description	_ repaint	repaint	and polish	polish	lacquer
	Process number	_ 1	2	4	5	9
	Constant allowance	2.40	1.00	0.40	0.35	0.80
Operation Number and Description	Material allowance code y					

79-S	INTERIOR DOORS						
79-SCA	Door - front - inner - LH - complete	Α					0.70
79-SDA	A Door - front - inner - RH - complete A						0.70
70.1/							
79-V	INTERIOR ENGINE COMPARTMENT						
79-VBA	Engine compartment - local repairs only	Α					0.40
79-VBB	Platform - bonnet lock - complete	Α	0.70 <i>0.0</i> 5	0.30 <i>0.0</i> 5	0.05	0.05	0.25 0.05
79-W	INTERIOR LOAD SPACE						
79-WAA	Boot/load space - interior - local repairs only	Α					0.40

Process description	Local _ respray	<i>Local</i> strip
Process number	_ 3	8
Constant allowance	_ 0.70	0.00
Allowance per repair	_ 0.35	0.35

#### **MATERIALS ALLOWANCE**

Materials allowance code letters are shown alongside each refinishing operation. DO NOT QUOTE THESE ON WARRANTY CLAIMS (see Warranty Policy Procedures Manual). For your convenience when costing repairs, allowances can be calculated by adding the constant points to the points allocated to each letter and multiplying the sum by the monetary value. Use the points allowances given in the charts for your calculation. Monetary values will be issued and updated by policy letters as circumstances dictate.

## **CALCULATING MATERIAL ALLOWANCES**

Note: The value of materials used in refinishing more than one sub area of a panel must not exceed the allowances given for the complete panel.

Complete Panels - Single Panel Only Identify the panel, refinish process and materials code letter e.g. 79ECA1C Door, Front - LH - Panel - Complete - Strip and Repaint
Complete panels - Two or More  Identify the panel and refinish process and materials code letter e.g.  79ECA1C Door, Front - LH - Panel - Complete - Strip and Repaint = 139 points  79AAA2H Roof panel - Flat and Repaint = 491 points  79BAA5D Bonnet - Compound and polish = 17 points  Add the highest constant for the process undertaken, i.e., Strip and Repaint = 200 points  Total materials allowance points 79ECA1C, 79AAA2H and 79BAA5D = 847 points  MATERIAL COST ALLOWANCE = 847 x Monetary value
Local Repairs - Single panelIdentify the panel and refinish process and materials code letter e.g.79ECA3A Door, Front - LH - Local Repaint= 21 pointsLocal Repaint - Constant 3= 130 pointsTotal materials allowance points 79ECA3A= 151 pointsMaterial cost allowance = 151 x Monetary Value
Local repairs - Two or More  Identify panels, refinish processes and materials code letter e.g.  79ECA3A Door, Front - LH - Local Repaint
If it is necessary to complete two or more of the same processes on a panel, the following examples should be followed:
Identify panel, refinish process and materials code letter e.g.  79AAA6A Roof Panel - Local Compound and polish = 3 points  Number of repairs (3) = 3 x 3 points

## Local Strip Repair - One or More

## **COMPLETE PANEL CHART**

PROCESS NUMBER >>	1	2	4	5	9	
CONSTANT >>	200	130	20	20	130	
MATERIAL CODE						
A	37	21	3	3	21	
B	81	56	7	7	32	
C	139	100	10	10	45	
D	221	126	17	17	53	
E	373	183	28	28	71	
F	528	271	41	41	99	
G	722	370	56	56	130	
H	963	491	74	74	167	
	1253	647	96	96	216	
J	1598	828	122	122	272	
K	1973	1034	152	152	337	
L	2396	1262	184	184	408	
M	2848	1506	219	219	485	
N	3317	1758	255	255	563	
0	3782	2009	291	291	624	
P	4227	2248	325	325	717	
Q	4627	2463	356	356	783	
R	4967	2646	382	382	840	
S	5222	2783	402	402	884	
T	5381	2870	414	414	910	

## **LOCAL REPAIR CHART**

PROCESS NUMBER >>	3	8
CONSTANT >>	130	<u>-</u>
MATERIAL CODE		
A	21	37

Return to:						Dealers A	Address			
Technical communication Rover Group Commercial Division PO Box 29 Cowley										
Oxford										
OX4 5NL FAX 0186	5 746695									_
		R REVIEV	V OF MEC	CHANICA	L REPAI	R OPERAT	TION TIN	<b>IE</b>		
review for	m printed	below mus	t be reprodu	aced and c	ompleted i		•		ueries the /or technical	l
Operation	Number					Model				
Scheduled	Publication	on Part No.				Variant				
Published	Time	• • • • • • • • • • • • • • • • • • • •				Model Ye	ar			
Descriptio	n									
Details of			wah datail a	a naasihla	No action	vill be tels	an unlage t	hic informe	ution is provi	dad
	vide tills d	iata III as III	iucii uciaii a	s possible	. No action	i will be take	en umess t	ilis ilitorilia	mon is provi	ucu.
Diagnosis	Remove	Clean & Inspect	Dismantle & Overhaul	Refit	Adjust	Vehicle movement	Collect Parts	Collect Service tools	Total time taken	
Please stat	e specific	areas of co	ncern or dif	ficulty						
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