

BODY



BODY REPAIR PREPARATION & MAINTENANCE

Before any repair procedure is carried out, it is important that both inner and outer surfaces to be worked on are thoroughly cleaned. This panel preparation will make using these tools more effective and reduce wear and tear on the dollies and spoons. Hammers are very hard and, if misused either accidentally or otherwise, may easily chip causing flying splinters.

The condition of all tools should be constantly maintained and checked, eg a hammer shaft must be secure, there must be no cracks in the striking faces or chips of any description. Do not shorten an existing shaft if cracked or broken as this will affect the balance - replacement shafts are available for all Sykes-Pickavant beaters. All bright surfaces must be kept clean and free from blemishes that could be transferred to the body panels.



HAMMERS - CHOOSING AND USING



Beaters - the operation of beating metal is the greatest skill in body repair. The ability to control the intensity of the blows, together with the knowledge of how and where to direct them, is the mark of the expert.

Beaters should be well balanced as the force delivered to

Beaters should be well balanced as the force delivered to the metal surface will depend on the weight of the beater, the weight and size of the dolly or spoon and the area of actual contact with the panel.



Shrinking Beaters - useful in the final stages of panel finishing when slightly stretched areas of metal can be encountered.

In using this type of beater, small amounts of metal are forced into the spaces created by the cross milling. They can also be used on cold aluminium, but working on sheet steel will be quicker if heat is applied to the area. Whenever possible, such beating should be carried out on the inside of the panel to minimise resurfacing needed prior to painting.



Mallets - rubber mallets with interchangeable heads are ideal for use on aluminium and may be used in the manufacture of panels in sheet steel. Copper/rawhide mallets are double ended and ideal for bodyshop use.

DOLLIES - CHOOSING AND USING



Utility Dolly - placed in a damaged flange using the edge most suitable to the size and shape of the original.



Dome Dolly - used for re-shaping crowned panels, but its choice will depend on the shape of the original crown.



Thin Toe Dolly - toe dollies have a low crown and are most suitable for re-shaping. The dolly can be used in the hand to deliver a series of blows to the underside of the panel. This action releases any stresses locked in this area of metal.



Curved Dolly with Handle - handle provides extra reach for large curved surface, plus small surface on handle end for small area repair work.



Grid Dolly - this is a special dolly for shrinking work. It has a large crowned grid face on the surface and a plain flat face on the base for normal finishing. This dolly, combined with the shrinking beater and the application of heat, provides quick and effective shrinking.



Curved Dolly - used for raising a low spot on a panel. The edge can also be used to restore the shape of a roof.





Spoons - spoons are used for bumping and prying, they can also be used instead of a dolly when direct access to the rear of a panel is obstructed. The choice of spoon depends on the original contour of the metal, the amount of access available and the proposed action (ie roughing or levelling).



Bumping Tools - these are used for slapping out dents, with or without the backing support of a dolly. (For slight dents or a wavy surface, a dolly is not required). They should only be used where damage is moderate or slight, they are not intended to take the role of the spoon or beater and dolly.

PANEL BEATING HAMMERS

• High quality forged alloy steel heads with hardened striking surfaces

• Octagonal hickory shafts, secured with unique double-wedge system – wood and steel

• Selection of faces available, in both round and square formats:

Flat Face Crowned Face Shrinking Face

 For ease of identification, coloured rings are fitted to the hammer shafts to denote flat or crowned faces

Blue Flat Face Red Crowned Face Black Shrinking Face

Spares: 056020 Replacement Shaft and Wedge Kit



Panel Beating Hammers Range and Specifications

Part No.	Hammer Type	Face Type	Face (1) mm	Face (2) mm	Weight kg
056000	Standard Beating	Flat	Round – 41	Square – 38	0.425
056100	Standard Beating	Crowned	Round – 40	Square – 38	0.46
056800	Light Beating	Flat	Round – 30	Square – 28	0.40
056200	Light Beating	Crowned	Round – 30	Square – 28	0.368
052900	Pein & Finish	Flat	Round – 40	Straight pein	0.425
056500	Pein & Finish	Crowned	Round – 40	Straight pein	0.425

Panel Beating Hammers Range and Specifications cont.

Part No.	Hammer Type	Face Type	Face (1) mm	Face (2) mm	Weight kg
053000	Pick & Finish	Flat	Round – 39	Pick	0.430
056600	Pick & Finish	Crowned	Round – 40	Pick	0.42
056900	Shrinking	Flat & Shrinking	Round – 41	Square – 38	0.46
052800	Shrinking	Shrinking	Round – 41	Square – 38	0.425
053700	Curved Pein	Crowned	Round – 40	Curved Pein	0.425

MALLETS

053100

Rubber Faced Mallet

- Flat and cone shaped inter-changeable heads
- Ideal for use on aluminium and light gauge steel
- Replacement heads available:
 053111 Cone Shaped Head
 053112 Flat Shaped Head



053200

Copper / Rawhide Mallet

- Double-ended mallet, ideal for bodyshop use
- 1.1 kg weight



DOLLIES

- A range of high quality craftsman's dollies for shaping and forming body panels
- Drop forged from alloy carbon steel, hand ground and polished

Dolly Range and Specifications

Part No.	nge and Specifications	Description
054301		Thin Curved Dolly Length: 132mm Width: 59mm Depth: 41mm Weight: 1.14kg
054601		Pinch Wedge Dolly Length: 111mm Width: 65mm Depth: 26mm Weight: 0.82kg
054801	1/2	Thin Toe Dolly Length: 118mm Width: 55mm Depth: 25mm Weight: 0.94kg
054901		Anvil Dolly Length: 102mm Width: 73mm Depth: 62mm Weight:1.44kg
055001		Grid Toe Dolly Length: 120mm Width: 59mm Depth: 31mm Weight: 1.30kg
055201		Utility Dolly Length: 70mm Width: 70mm Depth: 64mm Weight: 1.26kg

Part No.	Description
055401	Heel Dolly Length: 80mm Width: 61mm Depth: 30mm Weight: 0.90kg
055501	Hatchet Dolly Length: 124mm Width: 54mm Depth: 29mm Weight: 0.74kg
055601	Curved Head Dolly Length: 128mm Width: 91mm Depth: 69mm Weight: 1.42kg
055701	Dome Dolly Length: 56mm Width: 56mm Depth: 56mm Weight: 0.73kg
055801	Heavy Toe Dolly Length: 121mm Width: 59mm Depth: 30mm Weight: 1.30kg

BUMPING SPOONS

- A selection of bumping spoons for roughing and/or prying in the preparation of body panels
- Can also be used in place of a dolly where access is restricted

Bumping Spoons Range and Specifications

Part No.	Description	Length mm	Width mm	Weight kg
051201	Heavy Duty Pry Spoon	390	58	1.30
057300	Pry & Surfacing Spoon	290	52	0.76
057400	General Purpose Spoon	295	38	1.16
057800	Angled Surfacing Spoon	195	45	1.60

BUMPING TOOLS

- Curved serrated steel blades, ideal for flattening bumps and dents and for semi-finishing work on body panels
- Great for aluminium panels, thin steel or fine adjustment work, can be used for bumping, slapping or filling
- Milled serrated teeth help prevent metal stretch

Bumping Tools Range and Specifications

Part No.	Description	Length mm	Width mm	Weight kg
059400	Flat Blade	350	35	0.72
059500	Half Round	350	33	0.68
059700	Flat Blade Fine Cut	488	35	0.64
059800	Flat Blade Medium Cut	488	35	0.64

TOOL SETS

Contents

			Ki	t Part I	Kit Part No.			
Part No.	Description	058103	058201	058001	058301	058401		
	Number of tools	7	6	11	14	19		
052800	Panel Beater - Shrinking Flat Face			•	•	•		
052900	Panel Beater - Straight Pein Flat Face					•		
053000	Panel Beater - Pick And Flat Face					•		
053700	Panel Beater - Curved Pein Crowned					•		
056000	Panel Beater - Standard Flat Face	•		•		•		
056100	Panel Beater - Standard Crowned Face					•		
056200	Panel Beater - Light Crowned Face		•		•	•		
056500	Panel Beater - Straight Pein Crowned	•		•	•			
056600	Panel Beater - Pick And Crowned				•			
053100	Rubber Faced Mallet		•		•	•		
054301	Thin Curved Dolly	•		•	•	•		
054801	Thin Toe Dolly		•					
054901	Anvil Dolly		•					
055001	Grid Toe Dolly			•	•	•		
055201	Utility Dolly	•		•	•	•		
055401	Heel Dolly	•		•	•			
055701	Round Head Dolly					•		
055801	Heavy Toe Dolly	•		•	•	•		
051201	Heavy Duty Pry Spoon					•		
057300	Pry / Surfacing Spoon	•		•	•	•		
057400	General Purpose Spoon			•	•	•		
057800	Angled Surface Spoon				•	•		
059400	Bumping Blade Tool Flat		•			•		
059600	Door Lock Hole Reforming Tool							
057100	Adjustable File Blade Holder with 9TPI Body Blade			•	•	•		

058103

Body Repair Set – Starter Kit

- General purpose starter kit
- Contains 7 tools
- See left for kit contents



058201

Body Repair Set – Lightweight Kit

- Lightweight kit suitable for working on aluminium and light gauge steel
- Supplied in lockable metal case
- Contains 6 tools
- See left for kit contents



058001

Body Repair Set – Standard Kit

- Basic general purpose set of bodyshop toolsSupplied in lockable metal case
- Contains 11 tools
- See page 74 for kit contents



058301

Body Repair Set - General Kit

- Comprehensive general purpose set of bodyshop tools
- Supplied in lockable metal case
- Contains 14 tools
- See page 74 for kit contents



058401

Body Repair Set - Master Kit

- Master set of panel beating tools
- Supplied in lockable metal case
- Contains 19 tools
- See page 74 for kit contents



PANEL PULLING

• Slide hammer panel puller with steel hammer slide (1.6kg) • Replacement screws available for attaching to panels part no. 052712

BODY BLADES

057100

Adjustable Body Blade Holder Complete with 9TPI Blade (057111)

- Adjustable blade holder, suitable for forming and shaping fillers and metal during body repair work
- Made from aluminium with steel adjuster and base plate
- Range of blades available in single blades and boxes of 10
- Adjustable Body Blade Holder (without blade) part no. 057101





Body Blades

- Suit 057101 Body Blade Holder
- Heat treated and precision sharpened for easier cutting and extended life
- Each precision tooth is cut individually for accuracy and long life
- Edges of blade are chamfered to avoid damage to the vehicle body
- Available in single blades and boxes of 10

Specifications

Part No. Single	Part No. Box of 10	Description	TPI	Length mm
057111	057121	Standard Flat Cut	9	356
057112	057122	Fine Flat Cut	13	356
057115	057125	Plasticut Flat	6.5	356





HOLE CUTTING TOOLS

HOLE CUTTERS

040011

Zipcut Spot Weld Remover

- Adjustable, auto-centring tool for removal of spot welds
- 5/16" hex shank for use with drill chucks of 3/8" capacity
- Replaceable cutters and pins available:
 - 040014 Spare Cutters
 - 040015 Spare Pins (3)



Spot Weld Drills

• High speed cobalt steel drills, for removal of spot welds without distortion

Part No.	Description	Qty	Length mm	Drill Dia. mm
040201	Stubby	1	80	8
040213	Stubby	1	70	6.5



CryoCobalt™ Drill

- CryoCobalt™ Drills are specially designed for drilling very hard metals
- Ideal for drilling high strength alloy steels, ultra high strength boron steels, as well as aluminium chassis, panels and rivets
- Added cobalt increases micro-sharpness and operating temperatures
- Cryophase process improves flexibility and extends bit operating life
- CryoCobalt™ drills can be re-sharpened
- Material: CM-88™ chrome moly cobalt high heat steel
- Heat resistance: up to 1200°F / 650°C
- Hardness: 66-68Re
- Coating: gold oxide
- Cryophase: patented thermal cycling cryogenic treatment

Part No.	Description	Qty	Length mm	Drill Dia. mm
040265	135° Split Point	1	105	6.5
040280	135° Split Point	1	115	8



Multi-Cut Hole Cutter

• Self-centring conical hole cutter for metal, fibreglass and plastics up to 3mm thick

Part No.	Capacity mm	Steps mm	Shank Dia.
040900	11 - 29	1.6	3/8"



043000

Panel Hole Punch – 6mm

- Specialist tool for punching 6mm diameter holes in panels and flanges
- Shaped head to fit over gutters, wheel arches, etc



SHEET METAL TOOLS

CUTTING AND FOLDING

Lightweight Sheet Metal Cutters - Bench Mounted

- Reversible ratchet action roller cutters for straight, curved and angle cutting on mild sheet steel
- Includes safety shear pin to prevent damage from overloading
- Supplied with bench mounting bracket

Part No.	Description	Capacity mm	Replacement Cutter Wheel	Optional
042000	Lightweight	1.6	042002	Vice Mounting Block part no. 042001
042100	Heavy Duty	3.2	042102	-





042200

Sheet Metal Folder, Bench Model – 600mm width

- Produce up to 100° folds, for fabrication of box and channel sections
- Spring assisted clamping blades for ease of operation
- Vice mounted folder for mild steel up to 1.2mm thick and 610mm wide
- Supplied with protractor for accurate fold angles





EDGE SETTER

FLANGING AND CRIMPING

'Rolastep' Flanging Tools (Jogglers)

• Lightweight portable tool recommended for adhesive panel bonding

 For producing a continuous stepped flange (042300: 17mm and 042400: 12mm wide)

- Twin drive rollers can be adjusted for metal thickness to avoid distortion
- Simple to use with spanner, socket etc. to produce continuous stepped lap joint
- For use on sheet metal up to 1.2mm thick
- 042400 produces a continuous 12mm lap joint





Part No.	Dimensions mm	Step Width mm	Step Depth mm	Min. Internal Radius mm	Min. Radius Over Corrugation mm	Sheet Metal Thickness mm	Capacity swg	Drive Nut Size mm	Weight kg	Replacement Drive, Gear, Screw and Bush	Conversion
042300	290 x 60 x 70	17	1	33	12	0.5 to 1.2	24 to 18	17	1.15	042401	042403
042400	290 x 60 x 70	12	1	33	12	0.5 to 1.2	24 to 18	17	1.00	042401	042402

042500

Hand Edge Setter / Flanging Tool

- Hand operated tool, to produce a stepped edge on sheet metal up to 1.2mm thick
- 20mm wide jaw on specially designed head, produces stepped lap joints quickly with minimum effort



043100

Door Skin Crimping Tool

- Hand held tool for crimping and bending flanges when replacing door skins and panels
- Replaceable nylon pads prevent damage to doors when crimping
- Replacement pads available:





SELF GRIP PLIERS

WELDING CLAMPS

065008

Sheet Metal Clamp

- Wide jaw locking clamp for holding sheet steel and body panels
- Jaw width 75mm



065012

Deep Throat Welding Clamp

- Split jaw locking clamp, gives maximum access to working area
- Jaw width 75mm





065011

'C' Clamp

- Large capacity deep throat clamp with small gripping area for awkward shapes and access
- Jaw opening width 90mm. Jaws closed width up to 150mm. Depth 55mm



065014

'C' Clamp

• Extra large capacity deep throat clamp

• Jaw opening width – 300mm. Jaws closed width up to 405mm. Depth 250mm





065050

Spot Weld Plier

- For use as a standard welding clamp while MIG spot welding
- Product eliminates 'burn through' on thin panel work
- Features a copper alloy clamp pad with a low affinity for molten weld this does not allow the weld to adhere and prevents burn through
- Steel with copper alloy pad
- Supplied in wallet
- Body repair shops, industry, sheet metal works etc



065035

Micro Welding Clamp Set - 2 piece

- Compact lightweight aluminium clamps, quick and easy to use
- Length 100mm
- Capacity 20mm



065020

Axial Grip Welding Clamp 'L'

- Thin jaw flat axial grip clamp
- Jaw width 18mm
- Jaw capacity 18mm





065025

Axial Grip Welding Clamp 'J'

- Restricted access axial grip clamp
- Jaw width 18mm
- Jaw capacity 18mm





065030

Axial Grip Welding Clamp 'W'

- Wide jaw flat axial grip clamp
- Jaw width 56mm
- Jaw capacity 18mm





SELF GRIP PLIERS

GRIP WRENCHES

066000

Grip Wrench Set-5 piece

- A combination of five different popular grip wrench locking pliers presented in a practical plastic storage wallet
- An ideal set for both automotive and industrial technicians and engineers

Contents

Part No.	Description	Length (mm)	Capacity (mm)	Weight (g)
066001	5" Curved Jaw	135	0-30	180
066003	10" Curved Jaw	235	0-63	600
066008	7" Omnium Grip	200	0-40	410
066009	10" Omnium Grip	235	0-60	630
066012	10" Pinch-Off Clamp	235	30	380



066001

Curved Jaw Grip Wrench 5"

- General purpose grip wrench for a wide variety of applications
- Narrow profile, large opening curved shaped jaws
- Provides firm grip on all round shapes
- Length 135mm, capacity 0-30mm, weight 180g



066003

Curved Jaw Grip Wrench 10"

- General purpose grip wrench for a wide variety of applications
- Narrow profile, large opening curved shaped jaws
- Provides firm grip on all round shapes
- Length 235mm, capacity 0-63mm, weight 600g



066008

Omnium Grip Wrench 7"

- Modern, multipurpose design ideal for all trades, including welding, automotive, plumbing, DIY etc
- Unique jaw configuration combining straight, curved and convex profiles
- Versatile tool which securely grips round, flat and larger sized objects
- Length 200mm, capacity 0-40mm, weight 410g



066009

Omnium Grip Wrench 10"

- Modern, multipurpose design ideal for all trades, including welding, automotive, plumbing, DIY etc
- Unique jaw configuration combining straight, curved and convex profiles
- Versatile tool which securely grips round, flat and larger sized objects
- Length 235mm, capacity 0-60mm, weight 630g



066012

Hose Pinch-Off Clamp

- Instant clamping of hoses without risk of damage to the hose
- Ideal for brake, fuel, cooling system hoses
- Also suitable for small diameter pipe (up to 30mm)
- Length 235mm, capacity 30mm, weight 380g

