Lucas

AES

# Auto Electric Supplies Ltd

## MAIL ORDER CATALOGUE


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# IMPORTANT INFORMATION

**1. Choice of Items**
It is the customer's responsibility to ensure that the selected goods are suitable for their chosen application. Auto Electric Supplies Ltd can take no responsibility or liability for misuse of the goods supplied.

**2. Description of Goods**
All item descriptions and illustrations are merely intended to present an idea of the goods for sale. As suppliers to Auto Electric Supplies Ltd may change the design or materials used in their products, Auto Electric Supplies Ltd reserves the right to change without notice the designs and/or materials used in the products supplied by it, provided that the specification of the goods is not compromised.

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**3. Pricing**
All catalogue prices shown are in pounds sterling and are exclusive of VAT which will be charged at the standard rate on all items and delivery costs. Due to circumstances beyond our control, prices quoted in the catalogue may vary from time to time. Up to date prices can be found on our web site: www.autoelectricsupplies.co.uk.

**4. Returned Goods**
If for any reason you are not satisfied with the supplied goods, return them to us, unused, within 10 working days and we will give you a full refund. The returned items can alternatively be exchanged for goods to the same value, or credited to your account. Please note that cut lengths of cable, sleeving, etc. cannot be returned.

**5. Catalogue**
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**6. Ownership of Goods**
All goods supplied by Auto Electric Supplies Ltd shall remain the property of Auto Electric Supplies Ltd until such time as payment for the order has been received in full.

**7. Bank Details**

| | |
|---|---|
| Account Name: | Auto Electric Supplies Ltd |
| Account No: | 00483279 |
| Sort Code: | 30-98-52 |
| IBAN: | GB81LOYD30985200483279 |
| BIC: | LOYDGB21529 |
| Bank: | Lloyds TSB |

Company Reg. No: 5140360 VAT Reg. No: GB 771 3078 31


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# DELIVERY

## UK Mainland

### Standard Service

Up to £100 (exc. VAT): £3.75
Over £100 (exc. VAT): FREE

*Goods are despatched as soon as possible subject to stock levels and cleared payment. Most packages are sent by post, but **heavier parcels** will be despatched by Courier and **will require a signature on delivery**. Most standard deliveries arrive within 2-3 days.*

### Next Working Day Service

***NB. This service is only available for orders received before 1pm.***

Up to 30kg: £6.55

*Goods are despatched on the same day as the order is placed, subject to stock levels and cleared payment. Packages are sent either by Special Delivery or by Courier, and **will require a signature on delivery**. Although the vast majority of packages will arrive the following day, please note that this service is not guaranteed. Any 'Next Day' orders received on a Friday will be delivered the next working day (i.e. there are no deliveries on Saturdays, Sundays or Bank Holidays).*

## Overseas, Scottish Isles, Channel Islands & N. Ireland

Postage will be charged at £1.50 + cost, subject to a minimum charge of £3.75.

*Goods are despatched as soon as possible subject to stock levels and cleared payment. The method chosen for despatch is dependent on the weight and/or value of the goods ordered, and will be the most cost effective available. Should you require a Courier service, or confirmation of delivery costs, please contact us on +44 (0)1584 819552, or info@autoelectricsupplies.co.uk.*

# PVC CABLE

## STANDARD RANGE

General purpose low voltage cable suitable for use in automotive and marine applications in temperatures up to 70ºC. Consists of conductors of stranded copper wire which are PVC insulated. Cable descriptions give the number and size of cable strands and the total cross-sectional area of conductor. For example, 14/0.30, 1.0mm² refers to 14 strands of 0.30mm dia. cable giving a total cable conductor area of 1.0mm².

*Please note that there is a reduced choice of colours available for PVC cable, as motor vehicle manufacturers are now using thin wall cable as standard (see page 5).*

| *Cable Type* | *Current (A)* | *Approx.Cable OD (mm)* | *m* | *30m* | *50m* | *Part No.* |
|---|---|---|---|---|---|---|
| 9/0.30 | 5.75 | 2.3 | 0.25 | - | 6.60 | ***010101*** |
| 14/0.30 | 8.75 | 2.6 | 0.28 | - | 8.21 | ***010102*** |
| 28/0.30 | 17.5 | 3.3 | 0.40 | - | 13.75 | ***010103*** |
| 44/0.30 | 27.5 | 3.7 | 0.56 | - | 21.90 | ***010104*** |
| 65/0.30 | 35.0 | 5.0 | 0.74 | 19.25 | - | ***010105*** |
| 84/0.30 | 42.0 | 5.7 | 0.95 | 26.75 | | ***010106*** |
| 97/0.30 | 50.0 | 6.2 | 1.05 | 28.35 | | ***010107*** |
| 120/0.30 | 60.0 | 7.0 | 1.20 | 32.40 | | ***010108*** |
| 80/0.40 | 70.0 | 7.5 | 1.45 | 39.15 | | ***010109*** |

### USES:

| | | |
|---|---|---|
| ***010101*** | (0.65mm²) | Side/tail lamps, indicators, etc. |
| ***010102*** | (1.0mm²) | Side/tail lamps, indicators, fog lamps, general wiring. |
| ***010103*** | (2.0mm²) | Head lamps, wipers, screen heaters, petrol pumps, etc. |
| ***010104*** | (3.0mm²) | Charging circuits, main feeds. |
| ***010105*** | (4.5mm²) | Heavy duty charge circuits, alternator feeds. |
| ***010106*** | (6.0mm²) | Heavy duty charge circuits, alternator and battery feeds, etc. |
| ***010107*** | (7.0mm²) | Heavy duty charge circuits, alternator and battery feeds, etc. |
| ***010108*** | (8.5mm²) | Heavy duty charge circuits, alternator and battery feeds, etc. |
| ***010109*** | (10.0mm²) | Heavy duty charge circuits, alternator and battery feeds, etc. |

### COLOURS AVAILABLE:

*(When two colours are indicated, the first is the main colour and the second is the tracer colour).*

***010101***

| | | | |
|---|---|---|---|
| Black | Green | Orange | Red |
| Blue | Grey | Pink | White |
| Brown | Light Green | Purple | Yellow |

***010102***

| | | | |
|---|---|---|---|
| Black | Purple | Blue/Black | Brown/Red |
| Blue | Red | Blue/Brown | Brown/White |
| Brown | White | Blue/Green | Brown/Yellow |
| Green | Yellow | Blue/Red | Green/Black |
| Grey | Black/Blue | Blue/White | Green/Blue |
| Light Green | Black/Green | Blue/Yellow | Green/Brown |
| Orange | Black/Red | Brown/Black | Green/Purple |
| Pink | Black/Yellow | Brown/Green | Green/Red |

*contd...*



***010102 (contd)***

| | | | |
|---|---|---|---|
| Green/White | Red/Black | White/Blue | Yellow/Blue |
| Green/Yellow | Red/Green | White/Brown | Yellow/White |
| Light Green/Black | Red/White | White/Green | |
| Purple/Black | Red/Yellow | White/Red | |
| Purple/White | White/Black | Yellow/Black | |

***010103***

| | | | |
|---|---|---|---|
| Black | White | Brown/Blue | Red/Black |
| Blue | Yellow | Brown/Red | Red/Blue |
| Brown | Black/Green | Brown/White | Red/Brown |
| Green | Black/Red | Brown/Yellow | Red/White |
| Grey | Black/White | Green/Black | White/Red |
| Light Green | Blue/Green | Green/Red | Yellow/Black |
| Orange | Blue/Orange | Green/White | Yellow/Brown |
| Pink | Blue/Red | Green/Yellow | Yellow/Red |
| Purple | Blue/White | Purple/White | Yellow/White |
| Red | Blue/Yellow | Purple/Yellow | |

***010104***

| | | | |
|---|---|---|---|
| Black | Brown | Yellow | Brown/Yellow |
| Blue | Red | | |

***010105***

| | | | |
|---|---|---|---|
| Black | Brown | Red | Yellow |

***010106***

| | | |
|---|---|---|
| Black | Brown | Red |

***010107***

| | | |
|---|---|---|
| Black | Brown | Red |

***010108***

| | | |
|---|---|---|
| Black | Brown | Red |

***010109***

| | |
|---|---|
| Black | Red |

## MULTICORE CABLE

Consists of PVC insulated single conductors sheathed in black PVC outer.

| *Cable* | *Capacity (A)* | *m* | *30m* | *Part No.* |
|---|---|---|---|---|
| 2 x 9/0.30 | 5.75 | 0.52 | 12.42 | ***010201*** |
| 2 x 14/0.30 | 8.75 | 0.55 | 13.10 | ***010202*** |
| 2 x 28/0.30 | 17.50 | 0.83 | 19.80 | ***010203*** |
| 3 x 14/0.30 | 8.75 | 0.80 | 19.27 | ***010204*** |
| 3 x 28/0.30 | 17.50 | 1.60 | 38.50 | ***010205*** |

## TRAILER CABLE

Consists of a number of insulated single conductors sheathed in black PVC.

| *Cable* | *Capacity (A)* | *m* | *30m* | *Part No.* |
|---|---|---|---|---|
| 7 x 9/0.30 | 5.75 | 1.13 | 27.12 | ***010301*** |
| 6 x 14/0.30 + 1 x 28/0.30 | 6x8.75+17.5 | 1.55 | 37.28 | ***010302*** |

## IGNITION LEAD (HT CABLE)

| | m | 30m | Part No. |
|---|---|---|---|
| Copper conductors, black PVC insulated, 7mm diameter. | 0.72 | 17.05 | ***010401*** |
| As 010401, except 6mm diameter. | 0.55 | 13.20 | ***010403*** |

| | | | |
|---|---|---|---|
| Black silicone outer, white silicone core, with tinned copper conductors (19 strands of 0.25mm). Temp. range of -30 to 155ºC. Min. breakdown 35kV. | 1.48 | 37.74 | ***010402*** |

| | | | |
|---|---|---|---|
| High performance PVC HT cable having a core of 28 strands of 0.3mm copper. The outer PVC sheath is 7mm OD and is yellow with two black stripes. | 1.52 | 38.00 | ***010404*** |

| | | | |
|---|---|---|---|
| Ignition cable with a resistive core for use where supression is required. Overall diameter 7mm. Colour black. | 1.40 | 36.50 | ***010405*** |

## BATTERY/STARTER CABLE

There are two basic types of battery cable. There is semi-rigid (older type and fairly inflexible) and flexible (having 9 times as many finer strands and consequently being far more flexible). Available in either black or red.

### Semi-Rigid

| Cable | Cable Size ($mm^2$) | OD (mm) | Capacity (A) | m | 10m | Part No. |
|---|---|---|---|---|---|---|
| 37/0.71 | 15 | 8.0 | 105 | 2.95 | 28.50 | ***010501-**** |
| 37/0.90 | 25 | 9.7 | 170 | 4.18 | 39.93 | ***010502-**** |
| 61/0.90 | 40 | 11.8 | 300 | 5.45 | 52.86 | ***010503-**** |

** Specify colour: Red -R, Black -B*

### Flexible

| Cable | Cable Size ($mm^2$) | OD (mm) | Capacity (A) | m | 10m | Part No. |
|---|---|---|---|---|---|---|
| 206/0.30 | 16 | 8.2 | 110 | 2.71 | 25.00 | ***010604-**** |
| 266/0.30 | 20 | 9.5 | 135 | 2.75 | 25.00 | ***010601-**** |
| 196/0.40 | 25 | 9.8 | 170 | 3.52 | 32.45 | ***010602-**** |
| 315/0.40 | 40 | 12.0 | 300 | 5.06 | 46.20 | ***010603-**** |

** Specify colour: Red -R, Black -B*

*Please note: the flexible battery cable may be supplied with a different number of strands and strand sizes, but will be of the same cross-sectional area as that ordered.*

## EARTHING BRAID

Tinned copper earthing braid.

| Cable | Cable Size ($mm^2$) | OD (mm) | Capacity (A) | m | 10m | Part No. |
|---|---|---|---|---|---|---|
| 16x16/0.30 | 19 | 7.2 | 130 | 6.10 | 52.90 | ***010801*** |
| 16x32/0.30 | 37 | 11.1 | 260 | 10.40 | 93.88 | ***010802*** |

## THIN WALL CABLE

Thin wall low voltage cable, suitable for use in automotive and marine applications. Consists of conductors of stranded copper wire which are hard grade PVC insulated. Compared to standard PVC cable, the reduced insulation thickness and higher current capacity greatly reduces weight and volume. For these reasons, this cable is today used in preference to standard PVC cable by vehicle manufacturers. Good resistance to petrol, diesel and abrasion. Suitable for use from -40ºC to +105ºC. Cable descriptions give number and size of cable strands and the total cross sectional area of the conductor.

| Cable Type | Conductor Size ($mm^2$) | Current (A) | Cable O/D (mm) | m | 30m | 100m | Part No. |
|---|---|---|---|---|---|---|---|
| 16/0.20 | 0.5 | 11.0 | 1.6 | 0.21 | - | 9.25 | ***010701*** |
| 32/0.20 | 1.0 | 16.5 | 2.0 | 0.27 | - | 14.05 | ***010702*** |
| 28/0.30 | 2.0 | 25.0 | 2.7 | 0.36 | - | 24.60 | ***010703*** |
| 44/0.30 | 3.0 | 33.0 | 3.3 | 0.53 | 14.30 | 39.82 | ***010704*** |
| 56/0.30 | 4.0 | 39.0 | 3.7 | 0.72 | 16.72 | 49.50 | ***010705*** |
| 84/0.30 | 6.0 | 50.0 | 4.3 | 0.97 | 23.65 | - | ***010706*** |

***COLOURS AVAILABLE:***

*(When two colours are indicated, the first is the main colour and the second is the tracer colour).*

### ***010701*** (16/0.20 - 0.5$mm^2$ - 11.0A - cable OD 1.6mm)

| | | | |
|---|---|---|---|
| Black | Green | Pink | White |
| Blue | Grey | Purple | Yellow |
| Brown | Orange | Red | |

### ***010702*** (32/0.20 - 1.0$mm^2$ - 16.5A - cable OD 2.0mm)

| | | | |
|---|---|---|---|
| Black | Black/Red | Green/Blue | Purple/Black |
| Blue | Black/White | Green/Brown | Purple/Brown |
| Brown | Black/Yellow | Green/Purple | Purple/Green |
| Green | | Green/Red | Purple/Yellow |
| Grey | Blue/Black | Green/White | |
| Light Green | Blue/Orange | Green/Yellow | Red/Black |
| Orange | Blue/Pink | | Red/Blue |
| Pink | Blue/Red | Grey/Black | Red/Green |
| Purple | Blue/White | Grey/Green | Red/White |
| Red | Blue/Yellow | Grey/Orange | Red/Yellow |
| White | | Grey/Red | |
| Yellow | Brown/Black | Grey/White | White/Brown |
| | Brown/Green | Grey/Yellow | White/Orange |
| Black/Blue | Brown/Red | | |
| Black/Green | Brown/White | Pink/Black | Yellow/Black |
| Black/Grey | Brown/Yellow | Pink/Red | Yellow/Brown |
| Black/Pink | | Pink/White | Yellow/Red |
| Black/Purple | Green/Black | Pink/Yellow | Yellow/White |

### 010703 (28/0.30 - 2.0mm² - 25.0A - cable OD 2.7mm)

| | | | |
|---|---|---|---|
| Black | Purple | Blue/Yellow | Red/Black |
| Blue | Red | | Red/Blue |
| Brown | White | Brown/Blue | |
| Green | Yellow | Brown/Green | White/Brown |
| Grey | | Brown/Red | White/Orange |
| Orange | Blue/Red | Brown/White | |
| Pink | Blue/White | | Yellow/White |

### 010704 (44/0.30 - 3.0mm² - 33.0A - cable OD 3.3mm)

| | | | |
|---|---|---|---|
| Black | Orange | Brown/Blue | White/Black |
| Blue | Purple | Brown/Green | White/Orange |
| Brown | Red | Brown/Red | White/Red |
| Green | White | | |
| Grey | Yellow | Red/Yellow | |

### 010705 (56/0.30 - 4.0mm² - 39.0A - cable OD 3.7mm)

| | | | |
|---|---|---|---|
| Black | Brown | Red | Yellow |

### 010706 (84/0.30 - 6.0mm² - 50.0A - cable OD 4.3mm)

| | | | |
|---|---|---|---|
| Black | Brown | Red | Yellow |

## BRAIDED CABLE

### GENERAL CABLE

Braided cable is an authentic replacement cable for older vehicles such as classic and vintage cars. Manufactured by braiding modern PVC cable and then lacquering. The cable therefore looks like the original but has the electrical and mechanical properties of modern cable.

| *Cable Type* | *Cable Size (mm²)* | *Current (A)* | *m* | *30m* | *50m* | *Part No.* |
|---|---|---|---|---|---|---|
| 9/0.30 | 0.65 | 5.75 | 0.48 | - | 21.92 | ***020104*** |
| 14/0.30 | 1.0 | 8.75 | 0.56 | - | 25.12 | ***020101*** |
| 28/0.30 | 2.0 | 17.5 | 0.69 | - | 31.01 | ***020102*** |
| 44/0.30 | 3.0 | 27.5 | 0.91 | - | 41.16 | ***020103*** |
| 65/0.30 | 4.5 | 35.0 | 1.33 | 35.93 | - | ***020105*** |

*The colours listed below are stock colours. Other colours are available, subject to a minimum quantity of 30m. When two colours are indicated, the first is the main colour and the second is the tracer colour. Herringbone pattern can also be supplied (shown as -H in the tables below).*

### 020104 (9/0.30 - 0.65mm² - 5.75A - cable OD 3.0mm)

| | | | |
|---|---|---|---|
| Black | Brown | Purple | White |
| Blue | Green | Red | Yellow |



### 020101 (14/0.30 - 1.0mm² - 8.75A - cable OD 3.7mm)

| | | | |
|---|---|---|---|
| Black | Black/White-H | Green/Purple | Yellow/Green |
| Blue | Black/Yellow-H | Green/Red | |
| Brown | | Green/White | |
| Green | Blue/Red | | |
| Purple | Blue/White | Purple/Black | |
| Red | Blue/Yellow | | |
| White | | White/Black | |
| Yellow | | | |

### 020102 (28/0.30 - 2.0mm² - 17.5A - cable OD 4.2mm)

| | | | |
|---|---|---|---|
| Black | Yellow | Brown/Blue | White/Black |
| Blue | | Brown/White | White/Black-H |
| Brown | Blue/Red | | |
| Green | Blue/White | Green/Black | |
| Purple | Blue/White-H | | |
| Red | Blue/Yellow | Red/Black-H | |
| White | | | |

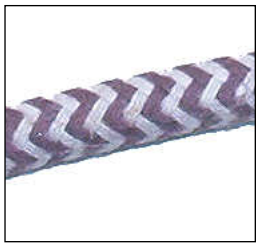
### 020103 (44/0.30 - 3.0mm² - 27.5A - cable OD 4.7mm)

| | | | |
|---|---|---|---|
| Black | Red | Brown/Blue | White/Red |
| Blue | White | Brown/White | |
| Brown | Yellow | | Yellow/Black |
| Green | | Red/Black-H | |
| Purple | Blue/White-H | | |

### 020105 (65/0.30 - 4.5mm² - 35A - cable OD 5.7mm)

| | | | |
|---|---|---|---|
| Black | Brown | Red | Yellow |

*Main colour with tracer*



*Herringbone pattern (-H)*

## BRAIDED BATTERY/STARTER CABLE

As per general cable, braided battery cable is modern PVC semi-rigid battery cable that has been braided in black cotton and lacquered.

| Cable | Cable Size ($mm^2$) | OD (mm) | Capacity (A) | m | 10m | Part No. |
|---|---|---|---|---|---|---|
| 37/0.71 | 15 | 8.0 | 105 | 4.17 | 37.95 | **020201** |
| 37/0.90 | 25 | 9.7 | 170 | 5.28 | 47.52 | **020202** |
| 61/0.90 | 40 | 11.8 | 300 | 6.55 | 58.91 | **020203** |

## BRAIDED MULTICORE CABLE

PVC insulated single conductors sheathed in black PVC outer, braided in black cotton and lacquered.

| Cable | Capacity (A) | m | 10m | Part No. |
|---|---|---|---|---|
| 2 x 9/0.30 | 5.75 | 1.64 | 13.11 | **020301** |
| 2 x 14/0.30 | 8.75 | 1.73 | 13.82 | **020302** |
| 2 x 28/0.30 | 17.50 | 1.95 | 15.58 | **020303** |
| 3 x 14/0.30 | 8.75 | 1.97 | 16.74 | **020304** |
| 3 x 28/0.30 | 17.50 | 2.34 | 18.74 | **020305** |

## BRAIDED HT CABLE

Copper cored braided HT cable, PVC insulated, available in black, yellow/black or red/black (other colours can be made on request). 7mm OD.

** Specify colour: Black -B, Yellow/Black -Y/B, Red/Black -R/B, Red/Yellow -R/Y*

| m | 25m | Part No. |
|---|---|---|
| 1.79 | 40.35 | **020401-*** |

# NON-INSULATED TERMINALS & CONNECTORS

These terminals are normally tin-plated brass, but are sometimes plain brass. They can be either crimped or soldered to the cable - for relevant crimping tools, see page 87. A convenient way to insulate and tidy a non-insulated terminal is to stretch a neoprene sleeve over the crimped part of the terminal. These can be found on page 51.

### Male Blade

| Width (mm) | Cable ($mm^2$) | 10 | 50 | Part No. |
|---|---|---|---|---|
| 4.8 | 0.3-0.8 | 0.61 | 2.44 | **030101** |
| 6.3 | 1.0-2.5 | 0.75 | 2.62 | **030102** |

### Female Blade

| Width (mm) | Cable ($mm^2$) | 10 | 50 | Part No. |
|---|---|---|---|---|
| 2.8 | 0.3-0.8 | 0.53 | 2.10 | **030201** |
| 4.8 | 0.5-1.3 | 0.64 | 2.55 | **030202** |
| 6.3 | 0.5-1.5 | 0.59 | 2.35 | **030203** |
| 6.3 | 1.0-2.5 | 0.62 | 2.46 | **030204** |
| 6.3 | 2.5-6.0 | 0.65 | 2.57 | **030205** |
| 9.5 | 2.0-4.0 | 1.04 | 4.18 | **030206** |

### Flag

| Width (mm) | Cable ($mm^2$) | 10 | 50 | Part No. |
|---|---|---|---|---|
| 6.3 | 1.0-2.5 | 0.86 | 3.41 | **030301** |

### Piggy Back

| Width (mm) | Cable ($mm^2$) | 10 | 50 | Part No. |
|---|---|---|---|---|
| 6.3 | 0.5-1.5 | 1.25 | 4.99 | **030401** |
| 6.3 | 1.5-2.5 | 1.08 | 4.29 | **030402** |

### Insulation Sleeves for Female Blades

| Width (mm) | Colour | Type | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.8 | Transparent | Flexible | 0.54 | 2.13 | **030501** |
| 6.3 | Black | Rigid | 0.91 | 3.63 | **030502** |
| 6.3 | Transparent | Flexible | 0.51 | 2.04 | **030503** |
| 9.5 | Red | Flexible | 1.49 | 5.93 | **030504** |
| 9.5 | Transparent | Flexible | 1.17 | 4.65 | **030506** |

### Insulation Sleeves for Flags

| Width (mm) | Material | 10 | 50 | Part No. |
|---|---|---|---|---|
| 6.3 | Clear vinyl PVC | 0.49 | 1.97 | **030601** |

### Bolt-On Blades and Adapters

| Type | 10 | 50 | Part No. |
|---|---|---|---|
| 6.3mm blade, 5.3mm mounting hole, flat | 1.08 | 4.29 | **030103** |
| 6.3mm blade, 5.3mm mounting hole, 45º | 1.05 | 4.20 | **030104** |
| 6.3mm blade, 5.3mm mounting hole, 90º | 1.10 | 4.40 | **030105** |
| 9.5mm blade, 5.3mm mounting hole, flat | 1.86 | 7.43 | **030106** |
| Adapter - converts 1 male 6.3mm blade to 2 | 1.16 | 4.64 | **030107** |

### Ring Terminals

***Standard***

| Hole dia. (mm) | (Imp) | Cable ($mm^2$) | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 3.2 | 4BA | 0.5-1.5 | 0.52 | 2.06 | **030701** |
| 4.3 | 3BA | 0.5-1.5 | 0.52 | 2.08 | **030702** |
| 5.3 | 2BA | 0.5-1.5 | 0.52 | 2.08 | **030703** |
| 6.4 | 1/4" | 0.5-1.5 | 0.67 | 2.67 | **030704** |
| 8.3 | 5/16" | 0.5-1.5 | 0.69 | 2.75 | **030705** |
| 10.4 | 3/8" | 0.5-1.5 | 0.78 | 3.11 | **030706** |
| 3.2 | 4BA | 1.0-2.5 | 0.64 | 2.45 | **030707** |
| 4.3 | 3BA | 1.0-2.5 | 0.66 | 2.65 | **030708** |
| 5.3 | 2BA | 1.0-2.5 | 0.69 | 2.75 | **030709** |
| 6.4 | 1/4" | 1.0-2.5 | 0.76 | 3.01 | **030710** |
| 8.3 | 5/16" | 1.0-2.5 | 0.77 | 3.06 | **030711** |
| 10.4 | 3/8" | 1.0-2.5 | 0.95 | 3.76 | **030712** |
| 4.3 | 3BA | 2.5-6.0 | 0.89 | 3.56 | **030713** |
| 5.3 | 2BA | 2.5-6.0 | 0.97 | 3.86 | **030714** |
| 6.4 | 1/4" | 2.5-6.0 | 1.21 | 4.86 | **030715** |
| 8.3 | 5/16" | 2.5-6.0 | 1.22 | 4.89 | **030716** |
| 10.4 | 3/8" | 2.5-6.0 | 1.39 | 5.54 | **030717** |

## Ring Terminals
### *Heavy Duty*

| *Hole dia. (mm)* | *(Imp)* | *Cable (mm²)* | *10* | *25* | *Part No.* |
|---|---|---|---|---|---|
| 4.3 | 3BA | 0.8-2.0 | 0.97 | 1.93 | ***030806*** |
| 5.4 | 2BA | 0.8-2.0 | 1.10 | 2.20 | ***030801*** |
| 6.4 | 1/4" | 0.8-4.0 | 1.46 | 2.92 | ***030802*** |
| 8.4 | 5/16" | 0.8-4.0 | 1.57 | 3.13 | ***030803*** |
| 9.8 | 3/8" | up to 5.0 | 3.58 | 7.15 | ***030804*** |

## Fork Terminals

| *Slot width (mm)* | *Cable (mm²)* | *10* | *50* | *Part No.* |
|---|---|---|---|---|
| 4.3 | 0.5-1.5 | 0.56 | 2.24 | ***030901*** |
| 5.2 | 0.5-1.5 | 0.59 | 2.39 | ***030902*** |
| 3.8 | 1.0-2.5 | 0.73 | 2.89 | ***030903*** |
| 5.2 | 1.0-2.5 | 0.73 | 2.89 | ***030904*** |

## NON-INSULATED TERMINAL KITS
See page 84.

## STANDARD BULLETS AND CONNECTORS (4.7mm dia.)
### Bullets
Suitable for crimping or soldering.

| *Max Cable (mm²)* | *10* | *50* | *Part No.* |
|---|---|---|---|
| 0.65 | 1.60 | 6.50 | ***031004*** |
| 1.0 | 1.66 | 6.62 | ***031001*** |
| 2.0 | 1.02 | 4.07 | ***031002*** |
| 3.0 | 1.52 | 6.05 | ***031003*** |

Suitable for crimping.

| *Max Cable (mm²)* | *10* | *50* | *Part No.* |
|---|---|---|---|
| 2.0 | 0.99 | 3.97 | ***031005*** |

### Bullet Connectors
For use with all 4.7mm dia. bullets (above).

| *Type* | *Each* | *10* | *50* | *Part No.* |
|---|---|---|---|---|
| Single | - | 1.26 | 5.06 | ***031101*** |
| Double (common) | - | 1.34 | 5.38 | ***031102*** |
| Triple (common) | 1.56 | 12.51 | - | ***031103*** |
| 5-way | 4.14 | 38.06 | - | ***031104*** |

## HOLLOW BULLETS - OLD STYLE
Useful for connecting cables to lamps, etc. Strip cable, push into bullet and fold strands over. 4.6mm OD.

| *Max Cable (mm²)* | *10* | *50* | *Part No.* |
|---|---|---|---|
| 2.0 | 1.10 | 4.40 | ***031006*** |

## BULLET KIT
See page 84.

## BULLET INSERTING/ CRIMPING TOOLS
See page 88.

## BULLET SOCKET
Can be soldered or crimped. Accepts 4.7mm dia. bullets above. Comes complete with insulation sleeve.

| *10* | *50* | *Part No.* |
|---|---|---|
| 4.54 | 18.15 | ***031201*** |

## JAPANESE BULLETS (3.9mm dia.)
Can be soldered or crimped. Suitable for cables 0.5 - 2.5mm².

| *Type* | *10* | *50* | *Part No.* |
|---|---|---|---|
| Bullet | 0.87 | 3.49 | ***031301*** |
| Bullet insulator | 0.53 | 2.11 | ***031302*** |
| Socket | 0.71 | 2.84 | ***031303*** |
| Socket insulator | 0.53 | 2.11 | ***031304*** |

# INSULATED TERMINALS & CONNECTORS

## STANDARD RANGE
Terminals are made from high conductivity copper strip, tinned for corrosion resistance. The colour-coded insulation sleeve extends beyond the crimping area to grip and support the cable insulation. Different colour insulation for different cable sizes.

### Male Blade

| *Width (mm)* | *Cable (mm²)* | *Colour* | *10* | *50* | *Part No.* |
|---|---|---|---|---|---|
| 6.3 | 0.5-1.5 | Red | 0.65 | 2.57 | ***040102*** |
| 6.3 | 1.5-3.0 | Blue | 0.67 | 2.69 | ***040104*** |
| 6.3 | 3.0-6.0 | Yellow | 0.80 | 3.19 | ***040105*** |

### Female Blade

| *Width (mm)* | *Cable (mm²)* | *Colour* | *10* | *50* | *Part No.* |
|---|---|---|---|---|---|
| 2.8 | 0.5-1.5 | Red | 0.59 | 2.35 | ***040201*** |
| 4.8 | 0.5-1.5 | Red | 0.80 | 3.22 | ***040202*** |
| 6.3 | 0.5-1.5 | Red | 0.74 | 2.96 | ***040203*** |
| 4.8 | 1.5-3.0 | Blue | 0.79 | 3.15 | ***040204*** |
| 6.3 | 1.5-3.0 | Blue | 0.77 | 3.08 | ***040205*** |
| 6.3 | 3.0-6.0 | Yellow | 0.89 | 3.54 | ***040206*** |
| 9.5 | 3.0-6.0 | Yellow | 1.53 | 6.09 | ***040207*** |

### Female Blade - Fully Insulated

| Width (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.8 | 0.5-1.5 | Red | 0.95 | 3.78 | **040301** |
| 6.3 | 0.5-1.5 | Red | 0.96 | 3.81 | **040302** |
| 4.8 | 1.5-3.0 | Blue | 0.98 | 3.90 | **040303** |
| 6.3 | 1.5-3.0 | Blue | 0.97 | 3.87 | **040304** |
| 6.3 | 3.0-6.0 | Yellow | 1.35 | 5.42 | **040305** |
| 9.5 | 3.0-6.0 | Yellow | 2.45 | 9.80 | **040306** |

### Piggy Back

| Width (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 6.3 | 0.5-1.5 | Red | 0.91 | 3.66 | **040401** |
| 6.3 | 1.5-3.0 | Blue | 0.98 | 3.89 | **040402** |
| 6.3 | 3.0-6.0 | Yellow | 1.51 | 6.02 | **040403** |

### Ring Terminals

| Hole dia. (mm) | (Imp) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|---|
| 3.2 | 4BA | 0.5-1.5 | Red | 0.46 | 1.86 | **040501** |
| 4.3 | 3BA | 0.5-1.5 | Red | 0.48 | 1.95 | **040502** |
| 5.3 | 2BA | 0.5-1.5 | Red | 0.52 | 2.07 | **040503** |
| 6.4 | 1/4″ | 0.5-1.5 | Red | 0.64 | 2.56 | **040504** |
| 8.4 | 5/16″ | 0.5-1.5 | Red | 0.68 | 2.72 | **040505** |
| 10.5 | 3/8″ | 0.5-1.5 | Red | 0.97 | 3.88 | **040506** |
| 12.0 | 1/2″ | 0.5-1.5 | Red | 1.07 | 4.27 | **040507** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4.3 | 3BA | 1.5-3.0 | Blue | 0.55 | 2.19 | **040508** |
| 5.3 | 2BA | 1.5-3.0 | Blue | 0.55 | 2.19 | **040509** |
| 6.4 | 1/4″ | 1.5-3.0 | Blue | 0.68 | 2.72 | **040510** |
| 8.4 | 5/16″ | 1.5-3.0 | Blue | 0.70 | 2.81 | **040511** |
| 10.5 | 3/8″ | 1.5-3.0 | Blue | 0.89 | 3.55 | **040512** |
| 12.0 | 1/2″ | 1.5-3.0 | Blue | 1.31 | 5.21 | **040513** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4.3 | 3BA | 3.0-6.0 | Yellow | 0.76 | 3.04 | **040514** |
| 5.3 | 2BA | 3.0-6.0 | Yellow | 0.84 | 3.34 | **040515** |
| 6.4 | 1/4″ | 3.0-6.0 | Yellow | 0.96 | 4.10 | **040516** |
| 8.4 | 5/16″ | 3.0-6.0 | Yellow | 1.18 | 4.71 | **040517** |
| 10.5 | 3/8″ | 3.0-6.0 | Yellow | 1.17 | 4.67 | **040518** |
| 12.0 | 1/2″ | 3.0-6.0 | Yellow | 1.66 | 6.66 | **040519** |

### Bullets

| Dia. (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.0 | 0.5-1.5 | Red | 0.68 | 2.71 | **040601** |
| 4.0 | 1.5-3.0 | Blue | 0.87 | 3.49 | **040602** |
| 5.0 | 1.5-3.0 | Blue | 0.87 | 3.49 | **040603** |
| 5.0 | 3.0-6.0 | Yellow | 1.59 | 6.38 | **040604** |

### Sockets

| Dia. (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.0 | 0.5-1.5 | Red | 0.80 | 3.22 | **040801** |
| 4.0 | 1.5-3.0 | Blue | 0.89 | 3.54 | **040802** |
| 5.0 | 1.5-3.0 | Blue | 0.89 | 3.54 | **040803** |
| 5.0 | 3.0-6.0 | Yellow | 1.59 | 6.38 | **040804** |

### Butt Connectors

| Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|
| 0.5-1.5 | Red | 0.68 | 2.72 | **040901** |
| 1.5-3.0 | Blue | 0.71 | 2.84 | **040902** |
| 3.0-6.0 | Yellow | 1.28 | 5.08 | **040903** |

### Fork Terminals

| Slot Width (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.3 | 0.5-1.5 | Red | 0.52 | 2.07 | **040701** |
| 5.3 | 0.5-1.5 | Red | 0.52 | 2.07 | **040702** |
| 6.4 | 0.5-1.5 | Red | 0.59 | 2.39 | **040703** |
| 4.3 | 1.5-3.0 | Blue | 0.49 | 1.98 | **040704** |
| 5.3 | 1.5-3.0 | Blue | 0.51 | 2.00 | **040705** |
| 6.4 | 1.5-3.0 | Blue | 0.68 | 2.71 | **040706** |
| 4.3 | 3.0-6.0 | Yellow | 0.70 | 2.82 | **040707** |
| 5.3 | 3.0-6.0 | Yellow | 0.75 | 2.97 | **040708** |
| 6.4 | 3.0-6.0 | Yellow | 1.01 | 4.03 | **040709** |

## INSULATED TERMINAL KITS

See page 84.

## HEATSHRINK INSULATED TERMINALS

These terminals offer superior performance over standard crimp terminals. After crimping, the hot-melt glue lined heatshrink sleeve is heated and shrunk down onto the cable. This increases the mechanical strength of the termination and its resistance to corrosion, as the melted glue effectively seals the joint.

### Male Blade

| Width (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 6.3 | 0.5-1.5 | Red | 4.01 | 16.06 | **041101** |
| 6.3 | 1.5-3.0 | Blue | 4.01 | 16.06 | **041102** |

### Female Blade - Fully Insulated

| Width (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 6.3 | 0.5-1.5 | Red | 4.57 | 18.26 | **041103** |
| 6.3 | 1.5-3.0 | Blue | 4.57 | 18.26 | **041104** |

*contd...*

## HEATSHRINK INSULATED TERMINALS *(contd)*

### Butt Connectors

| Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|
| 0.5-1.5 | Red | 3.52 | 14.08 | **041105** |
| 1.5-3.0 | Blue | 4.01 | 16.06 | **041106** |
| 3.0-6.0 | Yellow | 4.51 | 18.04 | **041107** |

### Ring Terminals

| Hole dia. (mm) | Cable (mm²) | Colour | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 4.0 | 0.5-1.5 | Red | 3.58 | 14.30 | **041108** |
| 5.0 | 0.5-1.5 | Red | 3.58 | 14.30 | **041109** |
| 6.0 | 0.5-1.5 | Red | 4.01 | 16.06 | **041110** |
| 4.0 | 1.5-3.0 | Blue | 3.58 | 14.30 | **041111** |
| 5.0 | 1.5-3.0 | Blue | 4.01 | 16.06 | **041112** |
| 6.0 | 1.5-3.0 | Blue | 4.24 | 16.94 | **041113** |
| 8.0 | 1.5-3.0 | Blue | 4.24 | 16.94 | **041114** |
| 5.0 | 3.0-6.0 | Yellow | 4.46 | 17.82 | **041116** |
| 6.0 | 3.0-6.0 | Yellow | 4.85 | 19.40 | **041117** |
| 8.0 | 3.0-6.0 | Yellow | 5.39 | 21.56 | **041118** |

## SELF-STRIPPING CONNECTORS

A range of self-stripping connectors that provide a quick yet effective means of joining a second or tapping cable to an existing wire.

| Main conductor size | Tapping cable | 10 | 50 | Part No. |
|---|---|---|---|---|
| 9/0.30-28/0.30 | 9/0.30 | 0.88 | 2.75 | **041201** |
| 9/0.30-28/0.30 | 9/0.30-28/0.30 | 0.88 | 2.75 | **041202** |
| 44/0.30-65/0.30 | 44/0.30-65/0.30 | 1.79 | 7.15 | **041203** |

# MULTIPLE CONNECTORS

## MINI UNIVERSAL "MATE-N-LOK" CONNECTORS

Based on the "Mate-N-Lok" range, but much smaller. For low current applications where space is at a premium. These multiple connectors use 1mm diameter round pins locked into plastic housings. Available from 2 to 15 pins. Supplied as a pair of male/female housings that positively lock together, together with all terminals. Suitable for cables up to 1.2mm². Maximum current 5A per terminal.

| No. of Terminals | Face Dim. (mm) | Each | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 2 | 6 x 11 | 1.47 | 12.53 | - | **051401** |
| 3 | 6 x 15 | 1.80 | 15.33 | - | **051402** |
| 4 | 10 x 12 | 2.22 | 18.89 | - | **051403** |
| 6 | 14 x 12 | 3.21 | 27.30 | - | **051404** |
| 9 | 14 x 16 | 4.27 | 36.28 | - | **051405** |
| 12 | 18 x 16 | 5.24 | 44.51 | - | **051406** |
| 15 | 22 x 16 | 6.38 | 54.23 | - | **051407** |
| Spare 1mm pins | | - | 1.64 | 6.56 | **051410** |
| Spare 1mm receptacles | | - | 1.64 | 6.56 | **051411** |

## UNIVERSAL "MATE-N-LOK" CONNECTORS

These multiple connectors use 2mm diameter round pins locked into plastic housings. Available from 2 to 15 pins. Supplied as a pair of male/female housings that positively lock together, together with all terminals. Suitable for cables up to 2mm². Maximum current 10A per terminal.

| No. of Terminals | Face Dim. (mm) | Each | 10 | 50 | Part No. |
|---|---|---|---|---|---|
| 2 | 8 x 14 | 1.38 | 11.69 | - | **051301** |
| 3 | 8 x 21 | 1.61 | 13.65 | - | **051302** |
| 6 | 21 x 14 | 2.51 | 21.32 | - | **051303** |
| 9 | 21 x 21 | 3.21 | 27.30 | - | **051304** |
| 12 | 21 x 27 | 3.98 | 33.85 | - | **051305** |
| 15 | 21 x 33 | 4.95 | 42.08 | - | **051306** |
| Spare 2mm pins | | - | 1.33 | 5.61 | **051310** |
| Spare 2mm receptacles | | - | 1.33 | 5.61 | **051311** |

## 3.5mm "MATE-N-LOK" CONNECTORS

These multiple connectors use 3.5mm diameter round pins, locked into plastic housings. Available from 2 to 9 pins. Supplied as a pair of male/female housings that positively lock together, together with all terminals. Suitable for cables between 2.0mm² and 5.0mm². Maximum current approximately 20A per terminal.

| No. of Terminals | Face Dim. (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 2 | 7 x 14 | 1.49 | 13.37 | **055001** |
| 3 | 7 x 20 | 1.76 | 15.84 | **055002** |
| 4 | 13 x 20 | 2.25 | 20.30 | **055003** |
| 9 | 20 x 20 | 4.24 | 38.06 | **055004** |

## 6.3mm BLADE CONNECTORS

These multiple connectors use 6.3mm blade terminals locked into plastic housings. They are available from 1 to 8 pins and are supplied as a pair of male and female quick release nylon connector housings. The terminals for the housings are available for two different wire sizes and should be purchased separately. Terminals are secured by crimping or soldering.

### Housings

| No. of Terminals | Each | 10 | Part No. |
|---|---|---|---|
| 1 | 0.31 | 2.69 | **050101** |
| 2 | 0.42 | 3.60 | **050102** |
| 2 (T-shape) | 0.47 | 4.10 | **050107** |
| 3 | 0.49 | 4.31 | **050103** |
| 4 | 0.58 | 5.05 | **050104** |
| 6 | 0.66 | 5.75 | **050105** |
| 8 | 0.82 | 7.21 | **050106** |
| 11 | 2.00 | 17.38 | **050108** |

### Terminals

| Type | Cable Size (mm²) | Each | 10 | Part No. |
|---|---|---|---|---|
| Male | 1.0-2.5 | 0.06 | 0.39 | **050201** |
| Female | 1.0-2.5 | 0.06 | 0.39 | **050203** |
| Male | 2.5-6.0 | 0.11 | 0.85 | **050202** |
| Female | 2.5-6.0 | 0.11 | 0.85 | **050204** |

## WATER-PROOF CONNECTORS

### Econoseal

Water-proof connectors. Suitable for cables up to 1mm². Supplied with all seals and terminals.

| Type | Face Dim. (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 2-way male | 18 x 13 | 1.83 | 16.43 | ***051201*** |
| 2-way female | 21 x 18 | 1.83 | 16.43 | ***051202*** |
| 3-way male | 23 x 13 | 2.18 | 19.60 | ***051203*** |
| 3-way female | 26 x 18 | 1.91 | 17.23 | ***051204*** |

### 1.5mm Blade - Superseal

Water-proof multiple connectors, 1 to 6 way. Supplied in pairs with all seals and terminals. Terminals can take cables up to 1.5mm². Current rating up to 14A per terminal.

| Terminals | Housing Dimensions | Each | 10 | 100 | Part No. |
|---|---|---|---|---|---|
| 1 | 54 x 14 x 14 | 2.34 | 19.92 | - | ***050601*** |
| 2 | 54 x 19 x 14 | 3.09 | 26.28 | - | ***050602*** |
| 3 | 54 x 25 x 14 | 4.30 | 36.56 | - | ***050603*** |
| 4 | 54 x 32 x 14 | 5.07 | 43.11 | - | ***050604*** |
| 5 | 54 x 38 x 14 | 6.52 | 55.45 | - | ***050605*** |
| 6 | 54 x 44 x 14 | 7.49 | 63.68 | - | ***050606*** |
| Spare male terminals | | - | 1.35 | 11.51 | ***050607*** |
| Spare female terminals | | - | 1.74 | 14.77 | ***050608*** |

### 2.8mm Blade - Superseal

Water-proof multiple connectors, 1 to 3 way. Supplied in pairs with all seals and terminals. Terminals can take cables up to 2mm².

| Terminals | Housing Dimensions | Each | 10 | Part No. |
|---|---|---|---|---|
| 1 | 63 x 16 x 15 | 3.52 | 29.92 | ***050701*** |
| 2 | 63 x 23 x 15 | 4.25 | 36.13 | ***050702*** |
| 3 | 66 x 30 x 15 | 7.02 | 59.65 | ***050703*** |

### Circular Rubber Connectors

Rubber connectors suitable for harsh environments. The one-piece moulded halves have wire seals offering high resistance to fluid ingress. Supplied in kit form, with both mating half connectors and all terminals. Current rating 8A.

| Way | Housing Diameter (mm) | Each | Part No. |
|---|---|---|---|
| 2 | 16 | 5.87 | ***051001*** |
| 3 | 18 | 6.27 | ***051002*** |
| 4 | 21 | 6.73 | ***051003*** |
| 5 | 23 | 7.02 | ***051004*** |
| 6 | 25 | 7.51 | ***051005*** |

### Junior Power Timer Connectors

Female housings are available in 5 different configurations with either 2, 3, 4, 5 or 6 terminals. Only one male housing is stocked, which has 2 terminals. Terminals for the housings should be purchased separately and are available for two different cable sizes, together with wire seals which push into the back of the connectors (also available for two different size cables). Rubber boots are available to seal the back of the 2 and 3-way connectors.

| No. of Terminals | Type | Each | 10 | Part No. |
|---|---|---|---|---|
| 2 | Female Housing | 1.10 | 9.35 | ***051501*** |
| 3 | Female Housing | 1.59 | 13.56 | ***051502*** |
| 4 | Female Housing | 2.75 | 23.38 | ***051503*** |
| 5 | Female Housing | 5.60 | 50.40 | ***051504*** |
| 6 | Female Housing | 5.78 | 51.02 | ***051505*** |
| 2 | Male Housing | 2.20 | 18.70 | ***051507*** |

| | | | |
|---|---|---|---|
| Female terminals for 0.5-1.0mm² cable | 0.33 | 2.75 | ***051601*** |
| Male terminals for 0.5-1.0mm² cable | 0.33 | 2.75 | ***051603*** |
| Female terminals for 1.5-2.5mm² cable | 0.33 | 2.75 | ***051602*** |
| Male terminals for 1.5-2.5mm² cable | 0.33 | 2.75 | ***051604*** |
| Wire seal for 1.2-2.1mm² cable (blue) | 0.18 | 1.58 | ***051801*** |
| Wire seal for 2.2-3.0mm² cable (white) | 0.19 | 1.68 | ***051802*** |
| Blanking wire seal (brown) | 0.22 | 1.98 | ***051803*** |

| | | | |
|---|---|---|---|
| Rubber boot for 2-way connector (90º) | 0.88 | 7.48 | ***051701*** |
| Rubber boot for 3-way connector | 0.99 | 8.41 | ***051702*** |

### 7-POLE CYLINDRICAL CABLE CONNECTOR

| Each | Part No. |
|---|---|
| 4.35 | ***051901*** |

Comprises of moulded plug and socket and rubber covers. Supplied with terminals. 3mm pins/sockets. Overall joined connector size approx. 60 x 25mm (without rubber covers). Can accept 7 cables up to 2mm² each.

### 3-POLE PLUG & SOCKET

3-pin black thermoplastic plug/socket having two larger pins and one small pin. All terminals are nickel plated and are rated at 2 x 25A and 1 x 5A respectively. Plug diameter 30mm and overall length 70mm. Comes with plastic dust cap for when not in use. Socket has mounting flange and spring loaded cap to prevent water ingress when not in use.

| Type | Each | Part No. |
|---|---|---|
| Socket | 5.10 | ***052001*** |
| Plug | 5.10 | ***052002*** |

## LARGE CABLE CONNECTORS

Single and double pole large cable connectors, having a current capacity of 75A. Supplied in pairs with all terminals (8mm blades) and terminal locking tabs.

| *Terminals* | *Cable Size (mm²)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 1 | 4-6 | 5.46 | 46.44 | ***050801*** |
| 2 | 4-6 | 8.55 | 72.70 | ***050802*** |
| 1 | 6-10 | 5.46 | 46.44 | ***050803*** |
| 2 | 6-10 | 8.55 | 72.70 | ***050804*** |

## LUCAS/BOSCH ALTERNATOR PLUG

Black plastic plug servicing most Bosch and Lucas alternators. Contains 2 x 9.5mm and 1 x 6.3mm female blade connectors.

| *Each* | *Part No.* |
|---|---|
| 3.08 | ***050901*** |

## HEAD LAMP CONNECTING SOCKETS

For connecting to P43t and P45t bulbs and sealed beam lamps. Supplied with terminals.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Straight terminals | 1.41 | ***050501*** |
| 90º terminals (wire exits from side of socket) | 1.46 | ***050502*** |

## CONNECTORS - GENERAL

### Blade Terminal Connectors

Insulated connector to join two or three 6.3mm female blade terminals together.

| *Type* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| Connector to join two blade terminals | 0.28 | 2.34 | ***051101*** |
| Strip of 12 of above | 1.79 | 15.25 | ***051102*** |
| Connector to join three blade terminals | 0.48 | 4.11 | ***051103*** |

### Standard PVC 12-Way Terminal Blocks

| *Maximum cable size (mm²)* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| 3.0 | 0.42 | 3.55 | ***051104*** |
| 4.0 | 0.44 | 3.74 | ***051105*** |
| 6.0 | 0.69 | 5.90 | ***051106*** |

### Plug Together

Pair of male/female 12-way terminal blocks that can be plugged together and easily cut down to smaller units. Pin size 2.6mm. Maximum cable 44/0.30 (3mm²).

| *Each* | *Part No.* |
|---|---|
| 3.96 | ***051107*** |

### Terminal Blocks - Screw/Screw

Terminal blocks with screw/screw terminations. Made from black filled polyester with chassis fixing holes. Screws are 4BA.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 4-way | 3.32 | ***051108*** |
| 12-way | 6.49 | ***051109*** |

### Terminal Block - 7 Way

Terminal block with 7 common screw connections. Single mounting hole.

| *Each* | *Part No.* |
|---|---|
| 3.75 | ***051110*** |

## IGNITION RELATED ITEMS

### SPARK PLUG TERMINALS

**Solder Type**

Blade type spark plug terminals.

| *Each* | *10* | *Part No.* |
|---|---|---|
| 1.04 | 8.88 | ***060103*** |

**Crimp Type**

Plated Steel. Suitable for 7mm ignition cable.

| *Item* | *Suitable Cover* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| Straight | 060201 | 0.15 | 1.28 | ***060101*** |
| 90º | 060202 | 0.21 | 1.65 | ***060102*** |

### SPARK PLUG TERMINAL COVERS

Black hypalon. Suitable for 7mm ignition cable.

| *Item* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| Straight | 0.49 | 3.96 | ***060201*** |
| 90º | 0.77 | 6.29 | ***060202*** |

### DISTRIBUTOR/COIL ACORNS

| *Item* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| Distributor cap acorn (short) | 0.49 | 4.21 | ***060801*** |
| Coil acorn (long) | 0.99 | 8.41 | ***060802*** |
| Brass washers for above | 0.20 | 1.68 | ***060803*** |

## PLUG CAPS

### Non-Suppressed

| | Each | 10 | Part No. |
|---|---|---|---|
| Black phenolic straight plug cap, 70mm long. | 1.32 | 11.55 | **060501** |

### Suppressed

Black phenolic spark plug caps with a 10K ohm carbon suppressor.

| Item | Each | 10 | Part No. |
|---|---|---|---|
| Straight (57mm long) | 1.21 | 10.29 | **060601** |
| 90º | 1.17 | 9.89 | **060602** |
| In-line supressor (screw thread at each end) | 1.04 | 8.89 | **060603** |

## DISTRIBUTOR/COIL TERMINALS

Brass. Suitable for 7mm ignition cable.

| Item | Suitable Cover | Each | 10 | Part No. |
|---|---|---|---|---|
| Straight | 060401, 060402, 060403, 060405 | 0.20 | 1.75 | **060301** |
| 90º | 060404 | 0.28 | 2.34 | **060302** |
| Screw on | | 0.22 | 1.81 | **060303** |

## DISTRIBUTOR/COIL TERMINAL COVERS

Black PVC. Suitable for 7mm ignition cable.

| Item | Application | Int. Dia. (mm) | Each | 10 | Part No. |
|---|---|---|---|---|---|
| Straight | Dist | 15 | 0.15 | 1.32 | **060401** |
| Straight | Coil | 16 | 0.31 | 2.63 | **060402** |
| Straight | Coil | 19 | 0.15 | 1.32 | **060403** |
| 90º | Dist/Coil | 14 | 0.32 | 2.72 | **060404** |
| Straight | Dist | 14 | 0.22 | 1.93 | **060405** |

**HT TERMINAL KITS** - see page 84.

## IGNITION LEAD MARKERS

Heat-shrinkable ignition lead markers. White with black text. Shrink from 12mm dia. to a minimum of 4mm dia. when heated using a hot air gun. Sold in bags of 100, each bag having 10 of 0, 1, 2, 3, 4, 5, 6, 7, 8 & 9.

| | Each | Part No. |
|---|---|---|
| | 7.50 | **060901** |
| No's 1 to 4, one of each. | 0.44 | **060902** |
| No's 1 to 6, one of each. | 0.66 | **060903** |

## IGNITION LEAD SEPARATORS

Black nylon clip-on ignition lead separators. Available in two, three or four lead versions.

| Type | Each | Part No. |
|---|---|---|
| Two lead separator | 0.17 | **061001** |
| Three lead separator | 0.22 | **061002** |
| Four lead separator | 0.28 | **061003** |

## HT TESTER

Use this product to see whether you have a spark at the spark plug. Remove plug cap from spark plug, push tester onto the top of the spark plug and then reconnect plug cap to top of tester. The tester will flash each time there is a spark.

| Each | Part No. |
|---|---|
| 2.19 | **061201** |

## IGNITION COILS

### Standard Terminal

Metal cans with bakelite or polyester (060705) insulation. Connections via M5 studs or spade terminals. Coils are supplied with bolt-on 6.3mm male blades which can easily be removed to leave the studs available. HT connection via push-in terminal (060301, 060302 or 060303).

| Type | Each | Part No. |
|---|---|---|
| 12V standard coil | 13.26 | **060701** |
| 12V ballast resistor coil (for use with 060703) | 13.26 | **060702** |
| 6V standard coil | 14.30 | **060704** |
| 12V electronic coil (for transistorised ign. systems) | 14.30 | **060705** |

| | | |
|---|---|---|
| Ballast resistor 1.6 ohms (for use with 060702) | 4.38 | **060703** |

### Acorn Terminal

Coils with older style screw terminal HT connection. Low tension connections are 5mm studs which come complete with spade terminal connections (removable). Available as either 6V or 12V.

| Type | Each | Part No. |
|---|---|---|
| 12V | 15.62 | **060706** |
| 6V | 15.62 | **060707** |

### Lucas

| | Each | Part No. |
|---|---|---|
| Lucas DLB101 - standard 12V coil. | 17.50 | **060710** |
| Lucas DLB102 - standard 12V coil for use with 1.6 ohm ballast resistor (part no. 060703). | 18.60 | **060711** |
| Lucas DLB105 - high performance 12V coil. | 21.50 | **060712** |
| Lucas DLB110 - high performance 12V coil for use with 1.6 ohm ballast resistor (part no. 060703). | 25.90 | **060713** |

## LUCAS CONDENSERS

| Type | Each | Part No. |
|---|---|---|
| Lucas DCB104C | 3.87 | **061101** |

| | | |
|---|---|---|
| Lucas DCB121C | 10.50 | **061102** |

| | | |
|---|---|---|
| Lucas DCB203C | 4.62 | **061103** |

| | | |
|---|---|---|
| Lucas DCB703C | 4.07 | **061104** |

| | | |
|---|---|---|
| Lucas DCB752C | 3.19 | **061105** |

| | | |
|---|---|---|
| Lucas DCB101C | 3.03 | **061106** |

| | | |
|---|---|---|
| Lucas DCB221C | 4.35 | **061107** |

| | | |
|---|---|---|
| Lucas DCB112C | 4.03 | **061108** |

## BATTERY RELATED ITEMS

### BATTERY POST CLEANING BRUSH

Brush for cleaning standard battery posts and terminals.

| Each | Part No. |
|---|---|
| 10.89 | **072001** |

### ANTI-CORROSIVE COMPOUND

An anti-corrosive compound which neutralises corrosion and inhibits deterioration of terminals and metal parts on or near lead acid batteries.

| Each | Part No. |
|---|---|
| 3.10 | **072002** |

### BATTERY REMOVAL/CARRYING STRAP

Acid resistant belting, 25mm wide, with quick fix grips to fit terminal posts, and hooks for flat battery posts.

| Each | Part No. |
|---|---|
| 10.78 | **072003** |

### BATTERY POST WASHERS

Battery post washers help to prevent corrosion, ensuring good electrical contact and inhibiting deterioration of posts on lead acid batteries. Supplied in pairs.

| Pair | Part No. |
|---|---|
| 2.20 | **072005** |

### BATTERY BOX

Moulded in grey plastic, to accommodate most sizes of battery. 370mm long x 170mm wide x 270mm high.

| Each | Part No. |
|---|---|
| 38.88 | **072006** |

### BATTERY CLAMPS

Made from tinned brass.

#### Screw Type

| Pole Type | Cable ($mm^2$) | Each | Part No. |
|---|---|---|---|
| -ve | Up to 40 | 1.82 | **070101** |
| +ve | Up to 40 | 1.82 | **070102** |
| -ve | Up to 60 | 2.04 | **070103** |
| +ve | Up to 60 | 2.04 | **070104** |

#### Solder Type

| Pole Type | Cable ($mm^2$) | Each | Part No. |
|---|---|---|---|
| -ve | Up to 25 | 2.90 | **070205** |
| +ve | Up to 25 | 2.90 | **070206** |
| -ve | Up to 40 | 2.90 | **070201** |
| +ve | Up to 40 | 2.90 | **070202** |

#### Stud Type

| Pole Type | Stud Size (mm dia.) | Each | Part No. |
|---|---|---|---|
| -ve | 8 | 2.18 | **070301** |
| +ve | 8 | 2.18 | **070302** |

#### End Feed

Suitable for crimping or soldering. These are universal and will fit both positive and negative battery posts.

| Max. cable size ($mm^2$) | Each | Part No. |
|---|---|---|
| 20 | 1.93 | **072707** |
| 25 | 1.93 | **072708** |

## BATTERY CLAMP NUT/BOLT

Replacement nut and bolt for battery clamps. 5/16" Whitworth thread. Electro-tin plated. 38mm long.

| | Each | Part No. |
|---|---|---|
| | 0.33 | ***073003*** |

## BATTERY CLAMP COVERS

### For Screw and Solder Type Clamps

PVC battery terminal covers for use with screw and solder type battery terminals. Available in red or black.

| Cable Entry | Colour | Each | Part No. |
|---|---|---|---|
| LH | Black | 0.79 | ***070501*** |
| LH | Red | 0.79 | ***070502*** |
| RH | Black | 0.79 | ***070503*** |
| RH | Red | 0.79 | ***070504*** |

### For End Feed Type Clamps

For use with end feed type battery clamps (072707 & 072708).

| Colour | Each | Part No. |
|---|---|---|
| Red | 0.79 | ***070505*** |
| Black | 0.79 | ***070506*** |

### For Stud Type Clamps

For use with stud type battery clamps (070301 & 070302).

| Colour | Each | Part No. |
|---|---|---|
| Blue | 1.06 | ***070507*** |
| Red | 1.06 | ***070508*** |

## BATTERY CABLE CONNECTORS

These connectors are used to join battery cables. Heavy brass body with four grub screws and heat shrinkable sleeving.

| Max Cable Size ($mm^2$) | Each | Part No. |
|---|---|---|
| 25 | 5.17 | ***070601*** |
| 40 | 5.81 | ***070602*** |

## BATTERY LEAD JUNCTION BOX

A plastic junction box with a hinged lid capable of 300A continuous. It has 2 x 8mm studs so that many cables can be joined, and a fixing hole enabling it to be surface mounted.

| Each | Part No. |
|---|---|
| 7.92 | ***070701*** |

## BATTERY CABLE TERMINALS

### Open End

Tinned copper terminals suitable for crimping or soldering.

| Max Cable ($mm^2$)* | Stud Hole Size (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 10 | 6 | 0.40 | 3.37 | ***070901*** |
| 10 | 8 | 0.43 | 3.65 | ***070902*** |
| 10 | 10 | 0.46 | 3.93 | ***070903*** |
| 16 | 6 | 0.52 | 4.40 | ***070904*** |
| 16 | 8 | 0.54 | 4.62 | ***070905*** |
| 16 | 10 | 0.57 | 4.86 | ***070906*** |
| 25 | 6 | 0.59 | 5.05 | ***070907*** |
| 25 | 8 | 0.62 | 5.24 | ***070908*** |
| 25 | 10 | 0.64 | 5.42 | ***070909*** |
| 40 | 6 | 0.71 | 6.08 | ***070910*** |
| 40 | 8 | 0.75 | 6.36 | ***070911*** |
| 40 | 10 | 0.78 | 6.64 | ***070912*** |
| 40 | 12 | 0.81 | 6.92 | ***070913*** |

### Closed End

***Straight***

Closed end tinned copper terminals with inspection hole. Suitable for crimping or soldering.

| Max Cable ($mm^2$)* | Stud Hole Size (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 6 | 6 | 0.34 | 2.90 | ***071001*** |
| 6 | 8 | 0.34 | 2.90 | ***071002*** |
| 10 | 6 | 0.42 | 3.55 | ***071003*** |
| 10 | 8 | 0.42 | 3.55 | ***071004*** |
| 10 | 10 | 0.43 | 3.65 | ***071005*** |
| 10 | 12 | 0.43 | 3.65 | ***071006*** |
| 16 | 6 | 0.47 | 4.05 | ***071007*** |
| 16 | 8 | 0.51 | 4.30 | ***071008*** |
| 16 | 10 | 0.51 | 4.30 | ***071009*** |
| 16 | 12 | 0.53 | 4.49 | ***071010*** |
| 25 | 6 | 0.54 | 4.59 | ***071011*** |
| 25 | 8 | 0.56 | 4.77 | ***071012*** |
| 25 | 10 | 0.58 | 4.96 | ***071013*** |
| 25 | 12 | 0.60 | 5.14 | ***071014*** |
| 40 | 6 | 0.64 | 5.42 | ***071015*** |
| 40 | 8 | 0.67 | 5.71 | ***071016*** |
| 40 | 10 | 0.70 | 5.98 | ***071017*** |
| 40 | 12 | 0.75 | 6.36 | ***071018*** |
| 50 | 6 | 0.86 | 7.29 | ***071019*** |
| 50 | 8 | 0.89 | 7.58 | ***071020*** |
| 50 | 10 | 0.91 | 7.77 | ***071021*** |
| 50 | 12 | 0.94 | 7.95 | ***071022*** |

**NB: the figure given in $mm^2$ is the cross sectional area of the conductor of the cable, not its diameter. Please refer to page 4 for cable OD information.*

## BATTERY CABLE TERMINALS *(contd)*

### Closed End

***Right Angled***

Tinned copper terminals suitable for crimping or soldering.

| *Max Cable (mm²)** | *Stud Hole Size (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 16 | 8 | 0.73 | 6.17 | ***071104*** |
| 25 | 8 | 0.86 | 7.29 | ***071101*** |
| 40 | 8 | 1.03 | 8.79 | ***071105*** |
| 50 | 8 | 1.28 | 10.85 | ***071102*** |

### Flag Terminals

Terminals suitable for crimping or soldering.

| *Max Cable (mm²)** | *Stud Hole Size (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 50 | 9.5 | 0.64 | 5.42 | ***072202*** |
| 70 | 13.5 | 0.66 | 5.61 | ***072203*** |

** NB: the figures given in mm² are the cross sectional area of the suitable cable, not its diameter. Please refer to page 4 for cable OD information.*

## TERMINAL COVERS

Push-on black covers for terminals to insulate open or closed end battery terminals. 070801-03 are rubber, 070804 are nylon.

| *Int. Sleeve Dia. (mm)* | *Int. Cap Dia. (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 6 | 11 | 0.38 | 3.22 | ***070801*** |
| 7.5 | 15 | 0.39 | 3.30 | ***070802*** |
| 9 | 15 | 0.44 | 3.77 | ***070803*** |
| 17 | 27 | 0.75 | 6.38 | ***070804*** |

## BUTT SPLICES

Crimp butt splices for cable joining. Made from tinned copper.

| *Max. cable (mm²)* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| 2.5 | 0.13 | 1.12 | ***072607*** |
| 4 | 0.18 | 1.50 | ***072608*** |
| 6 | 0.28 | 2.34 | ***072601*** |
| 10 | 0.36 | 3.09 | ***072602*** |
| 16 | 0.37 | 3.19 | ***072603*** |
| 25 | 0.49 | 4.21 | ***072604*** |
| 35 | 0.64 | 5.42 | ***072605*** |
| 50 | 0.67 | 5.71 | ***072606*** |

## PREFORMED BATTERY CABLES

### Battery Terminal - Ring Terminal

Preformed battery cables made from 266/0.30mm, 20mm² battery cable, 135A capacity, 8mm ring terminal. Universal battery terminal to fit either positive or negative terminal.

| *Length (mm)* | *Each* | *Part No.* |
|---|---|---|
| 225 | 6.78 | ***072101*** |
| 300 | 7.02 | ***072102*** |
| 450 | 7.57 | ***072103*** |
| 600 | 8.58 | ***072104*** |

### Ring Terminal - Ring Terminal

Preformed battery cables made from 37/0.90, 25mm² black cable, with 170A capacity. At each end of the cable is an 8mm ring terminal.

| *Length (mm)* | *Each* | *Part No.* |
|---|---|---|
| 300 | 3.98 | ***071901*** |
| 450 | 4.85 | ***071902*** |
| 600 | 5.72 | ***071903*** |

## BONDING STRAPS

Universal flat bonding straps. Tinned copper, 100A, 24mm wide, 10mm diameter holes.

| *Length (mm)* | *Each* | *Part No.* |
|---|---|---|
| 150 | 2.22 | ***071401*** |
| 300 | 2.88 | ***071402*** |
| 450 | 3.54 | ***071403*** |

## EARTH STRAPS

Tinned copper, 110A, 10mm diameter hole in end of braid. Fit negative battery terminal.

| *Length (mm)* | *Each* | *Part No.* |
|---|---|---|
| 150 | 3.08 | ***071301*** |
| 300 | 4.27 | ***071302*** |
| 450 | 5.45 | ***071303*** |

## BATTERY HOLD DOWN CLAMP

*Each* 2.92 *Part No.* ***072401***

Battery hold down clamp, punched angle bracket 348mm and two threaded 385mm J-bolts with wing nuts. Tin plated. Adjusts to fit all popular sizes of battery.

## POWER CONNECTORS & HANDLES

2 pole connectors used to safely and easily connect/disconnect battery/welding leads. 2 connectors are required. For example: one mounted on the vehicle, the other on the end of the jump start battery leads. Handles are available for use with the 175A and 350A rated connectors.

| *Current Rating (A)* | *Max Cable (mm²)* | *Each* | *Part No.* |
|---|---|---|---|
| 50 | 6 | 6.55 | ***071501*** |
| 175 | 50 | 9.88 | ***071502*** |
| 350 | 70 | 16.10 | ***071503*** |

### Handle

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 175A | 6.66 | ***071601*** |
| 350A | 6.66 | ***071602*** |

## BATTERY ISOLATOR SWITCHES

Battery isolator switches enable battery supply to be cut instantly. Vital in an emergency and also very useful during vehicle storage to ensure electrical isolation.

| Type | Each | Part No. |
|---|---|---|
| Isolator switch with removable key. 100A@ 24V, 500A for 5 sec. M8 studs. Spare key and rubber protector cap available separately. Two fixing holes 45mm apart. | 6.82 | ***071716*** |

| | | |
|---|---|---|
| Spare key for item 071716. | 1.78 | ***071710*** |

| | | |
|---|---|---|
| Rubber protector cap for item 071716. | 0.83 | ***071703*** |

| | | |
|---|---|---|
| Battery isolator switch with removable key and splash proof cover and independent ignition switch to prevent engine run on in an emergency. Supplied with 3 Ohm resistor to suppress alternator surge spikes from damaging the electrical system when isolator switch is operated. 100A@24V, 500V for 5 secs. M10 studs. Supplied with wiring diagram. Connection details - see page 91. | 21.08 | ***071704*** |

| | | |
|---|---|---|
| Spare key for item 071704. | 1.65 | ***071702*** |

| | | |
|---|---|---|
| Battery isolator with removable key in the 'on' or 'off' position. 100A@24V, 500V for 5 secs. M10 studs. Comes with 2 keys. Requires 23mm panel hole. | 26.89 | ***071705*** |

| | | |
|---|---|---|
| Lucas style SSB106 battery isolator with fixed black handle and metal case. 120A@12V. M10 studs. Requires 19mm panel hole. | 13.20 | ***071707*** |

| | | |
|---|---|---|
| Lucas SSB106 battery isolator. Has 150A continuous current capacity and 1500A intermittent capacity. 3/8" Whitworth studs. Requires 19.5mm mounting hole. | 39.05 | ***071717*** |

| Type | Each | Part No. |
|---|---|---|
| High quality, metal cased isolator switch. Waterproof to SAE J1171. 150A @ 24V continuous. 1000A @ 24V for 5 seconds. Non removable plastic key. Two fixing holes 45mm apart. | 32.73 | ***071708*** |

| | | |
|---|---|---|
| Lucas SSB103 battery isolator switch. *Limited stock available.* | 53.90 | ***071709*** |
| Replica version of above switch (looks virtually identical). | 32.50 | ***071718*** |

### Quick Disconnect

Battery terminals with a green plastic tightening wheel for quick disconnection. Ideal for isolating battery. Available with or without terminal bridging fuse holder (for radio, alarm and clock feeds). Fits negative battery terminal.

| Type | Each | Part No. |
|---|---|---|
| Without fuse | 7.26 | ***070401*** |
| With fuse | 10.85 | ***070402*** |

| | | |
|---|---|---|
| Marine battery isolator with removable key and splash proof cover. Rated at 100A@24V. M10 studs. Requires 22.5mm fixing hole. | 13.99 | ***071711*** |
| Spare key for item 071711. | 1.91 | ***071712*** |

| | | |
|---|---|---|
| Marine battery isolator and change over switch. Can be used to select between batteries one, two, both or off. Rated at 175A@12V and 300A for 5 seconds. M10 studs. 138mm x 138mm x 70mm. | 22.86 | ***071713*** |

## STARTER SWITCHES/SOLENOIDS

| Type | Each | Part No. |
|---|---|---|
| Lucas replacement starter solenoid. 12V with manual rubber button. 8mm stud terminals. | 21.45 | ***071801*** |

| | | |
|---|---|---|
| Lucas replacement basic 12V solenoid. 8mm stud terminals. | 10.89 | ***071802*** |

| | | |
|---|---|---|
| 6V starter solenoid. Battery cable connection via 2 x M8 Studs. Switch connection via M5 stud. Supplied mounted to bracket. | 21.12 | ***071807*** |

| | | |
|---|---|---|
| Floor mounted foot operated starter switch. 8mm stud terminals. | 22.23 | ***071803*** |

| | | |
|---|---|---|
| Lucas SRB312 starter switch. 2 x 5/16" stud terminals. Needs 10mm mounting hole. | 24.75 | ***071804*** |

| | | |
|---|---|---|
| Lucas starter switch SRB311 (ST18/1). 2.5" dia. black fixing plate with aluminium knob. 2 x 5/16" stud terminals. | 38.76 | ***071805*** |

# SWITCHES

## TOGGLE SWITCHES

### Metal

Metal toggle switches with plated levers. All have 6.3mm blade terminals and require a 13mm panel hole. Current ratings in the table below are at 12V. (On) = momentarily on.

***Single Pole***

| Type | Positions | Terminals | Current (A) | Each | Part No. |
|---|---|---|---|---|---|
| On/Off | 2 | 2 | 16 | 3.42 | ***080101*** |
| Off/(On) | 2 | 2 | 16 | 3.85 | ***080107*** |
| On/On | 2 | 3 | 16 | 3.63 | ***080102*** |
| On/Off/On | 3 | 3 | 16 | 3.63 | ***080103*** |
| On/Off/(On) | 3 | 3 | 16 | 4.05 | ***080104*** |
| (On)/Off/(On) | 3 | 3 | 16 | 4.05 | ***080106*** |
| Off/OnA/OnA+B | 3 | 3 | 20 | 7.44 | ***080105*** |



### Metal *(contd)*

***Double Pole***

| Type | Positions | Terminals | Current (A) | Each | Part No. |
|---|---|---|---|---|---|
| On/Off | 2 | 4 | 16 | 4.85 | ***080201*** |
| On/On | 2 | 6 | 16 | 5.26 | ***080202*** |
| On/Off/On | 3 | 6 | 16 | 5.39 | ***080203*** |

| | | |
|---|---|---|
| Rubber cap for above switches. Fits all metal toggle switches except part no. 080105. | 1.16 | ***080301*** |

### Splash Proof

Single pole switches with rubber sealing gaiters over nickel plated brass levers. 6.3mm blade terminals. Require 13mm panel hole. 10A@12V. (On) = momentarily on.

| Type | Positions | Terminals | Each | Part No. |
|---|---|---|---|---|
| On/Off | 2 | 2 | 7.26 | ***081801*** |
| On/Off/On | 3 | 3 | 8.27 | ***081802*** |
| On/Off/(On) | 3 | 3 | 8.07 | ***081803*** |
| (On)/Off/(On) | 3 | 3 | 8.07 | ***081804*** |

### Lucas

Original Lucas items (except 081605 which is a good quality replica of SPB200). Connections via 6.3mm blade terminals. All require 13mm panel hole. Fit panels up to 3mm thick.

| Type | Lucas Part No. | Positions | Current (A) | Each | Part No. |
|---|---|---|---|---|---|
| On/Off (repro.) | - | 2 | 5 | 5.50 | ***081605*** |
| On/Off | SPB200 | 2 | 5 | 10.95 | ***081601*** |
| On/Off/On (ind.) | 31743 | 3 | 10 | 15.18 | ***081602*** |
| On/On | 31780 | 2 | 10 | 15.05 | ***081603*** |
| Off/OnA/On A+B | 31788 | 3 | 10 | 17.16 | ***081604*** |

### LED Toggle Switches

Nickel plated on/off single pole toggle switches, with 12/24V LED indicator at end of toggle. 6.3mm blade terminals, 13mm panel hole. 10A @ 28V dc.

| Type | Each | Part No. |
|---|---|---|
| Blue LED | 4.25 | ***082201*** |
| Green LED | 4.25 | ***082202*** |
| Red LED | 4.25 | ***082203*** |
| Amber LED | 4.25 | ***082204*** |

### Metal/Plastic

*081701*

*081702*

Toggle switches with turned aluminium levers. Single pole. Require 13mm panel hole. Maximum panel thickness 2.5mm. On/off switch is round, on/off/on is teardrop shaped.

| Type | Positions | Terminals | Current (A) | Each | Part No. |
|---|---|---|---|---|---|
| On/Off | 2 | 2 | 6 | 4.51 | ***081701*** |
| On/Off/On | 3 | 3 | 6 | 3.54 | ***081702*** |

*contd...*

## TOGGLE SWITCHES *(contd)*

### Miniature

Toggle switches with metal lever, requiring 6mm panel hole. Solder connections. 6A @ 12V, 3A @ 24V.

| *Type* | *Positions* | *Terminals* | *Each* | *Part No.* |
|---|---|---|---|---|
| On/Off | 2 | 2 | 2.25 | ***082301*** |
| On/On | 2 | 3 | 2.25 | ***082302*** |
| On/Off/On | 3 | 3 | 2.25 | ***082303*** |

### Plastic

Toggle switches with black plastic levers. 6.3mm blade terminals. Require 13mm panel hole. All single pole. Current ratings below are at 12V. (On) = momentarily on.

| *Type* | *Positions* | *Terminals* | *Current (A)* | *Each* | *Part No.* |
|---|---|---|---|---|---|
| On/Off | 2 | 2 | 10 | 0.66 | ***080401*** |
| (On)/Off | 2 | 2 | 16 | 0.84 | ***080402*** |
| On/On | 2 | 3 | 5 | 0.84 | ***080403*** |
| On/Off/On | 3 | 3 | 10 | 2.77 | ***080404*** |

### Long Lever Plastic

| | *Each* | *Part No.* |
|---|---|---|
| On/Off switch with long black lever with two 6.3mm blade terminals. Requires 12.5mm panel hole. 10A@12V. 75mm long toggle. | 2.15 | ***080406*** |
| Off/(On) - momentarily on. 12V. 16A. 55mm long toggle. | 2.15 | ***080407*** |

### Illuminated Plastic

| | *Each* | *Part No.* |
|---|---|---|
| On/Off toggle switches which illuminate when switched on. 10A@12V. Require 13mm panel hole. 2 x 6.3mm blade terminals. Available in blue, green or red. ** Specify colour: Blue -U, Green -G, Red -R* | 1.44 | ***080501-**** |

## SWITCH PANELS

All switch panels have 13mm mountings holes.

### Black Coated Steel

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Single | 0.79 | ***080601*** |
| Double | 1.05 | ***080602*** |

### Black Plastic

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 1 hole | 0.55 | ***080603*** |
| 2 holes | 0.72 | ***080604*** |
| 3 holes | 0.88 | ***080605*** |
| 4 holes | 1.10 | ***080606*** |

## TOGGLE SWITCH FASCIA

Simply place under the nut that secures the switch. A tag on the fascia ensures it is the correct way up. Chromed steel.

| *Each* | *Part No.* |
|---|---|
| 0.57 | ***082001*** |

## TOGGLE SWITCH SAFETY GUARD

Moulded plastic, spring loaded to cover toggle. Prevents accidental switch use. Fits most 13mm diameter toggle switches. Available in four colours.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Red | 2.64 | ***082002*** |
| Blue | 2.64 | ***082003*** |
| Green | 2.64 | ***082004*** |
| Yellow | 2.64 | ***082005*** |

## PUSH/PULL SWITCHES

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Simple push/pull switch. On/off. Black knob. 2 x screw terminals. 25A@12V. 8mm fixing hole. Maximum panel thickness 2.5mm. | 1.43 | ***080701*** |

| | | |
|---|---|---|
| As above except maximum panel thickness 12mm. | 1.54 | ***080707*** |

| | | |
|---|---|---|
| 3 position push/pull heavy duty switch. Off/On A/On A+B. Suitable for side/headlamps. Screw terminals. 10A@12V. 13mm fixing hole. | 7.35 | ***080702*** |

| | | |
|---|---|---|
| Illuminated on/off push/pull switch. Only illuminated when switched on. 6.3 mm blade terminals. 10A@12V. 13mm fixing hole. Available with green, red, white or amber lens. ** Specify colour: Green -G, Red -R, White -W, Amber -A* | 7.25 | ***080703-**** |

| | | |
|---|---|---|
| Replica Lucas SPB104. Push/pull on/off switch. 2 screw terminals. Requires 10mm panel hole. Maximum panel thickness 13mm. | 11.50 | ***080708*** |

## PUSH BUTTON SWITCHES

| | Type | Each | Part No. |
|---|---|---|---|
| | Black knob, metal housing. One screw terminal. Pressing button connects terminal to metal housing. 12.5mm fixing hole. | 12.05 | ***080810*** |
| | Black knob, plastic housing. Two screw terminals. 15.5mm fixing hole. 7A@12V. | 3.96 | ***080812*** |
| | Push/push button switch. Metal button, metal housing. When pushed on, it remains on until pushed again. 13mm panel hole. 2 x 6.3mm blade terminals. 6A@12V DC. | 8.73 | ***080813*** |
| | Stainless steel button and nickel plated brass body. Screw terminals. Requires 19mm panel hole. 6A @ 12V DC. | 3.75 | ***080814*** |
| | Red plastic button and aluminium body. 2 x 6.3mm blade terminals. Requires 22mm panel hole. | 5.80 | ***080815*** |
| | Chrome plated steel body with recessed red button. 2 x screw connections. Requires 22mm panel hole. | 9.19 | ***080816*** |
| | Black knob, plastic housing. 12.5A@12V. 2 screw terminals. 22 mm fixing hole. | 3.65 | ***080801*** |
| | Black knob, metal housing. 10A@12V. 2 screw terminals. 22 mm fixing hole. | 4.55 | ***080802*** |
| | Bosch polished aluminium switch with black button. Surface mounted. Very similar to vintage Bosch switches, except cover clips on rather than screws on. 15A@12V. External diameter 35mm. 2 x screw terminals. | 21.50 | ***080804*** |
| | Lucas SPB160 black horn push switch. Has screw terminals and two mounting ears with mounting hole centres 42.5mm apart. 5A@12V. | 10.40 | ***080808*** |



| | Type | Each | Part No. |
|---|---|---|---|
| | Water-proof push button switch. Has black rubber cover and requires 22.5mm panel hole. Maximum panel thickness 5mm. 2 x screw terminals. 16A@12V. | 4.92 | ***080806*** |
| | Lucas SPB106 panel switch. Chrome plated body with black push button. Requires 20mm panel hole. Maximum panel thickness 3mm. 2 x 6.3mm blade terminals. 11A@12V. | 16.83 | ***080807*** |
| | Replica version of above. | 12.65 | ***080817*** |

## DOOR SWITCHES

| | Type | Each | Part No. |
|---|---|---|---|
| | Plastic universal door switch. Single 6.3mm blade terminal (circuit completes through switch body). Centre distance between plunger and fixing screw 10-15mm. Plunger length 0-20mm and is self setting first time door is shut. | 2.20 | ***081501*** |
| | Plastic universal door switch having 2 x 6.3mm blade terminals. Dimensions as above. | 2.42 | ***081502*** |
| | Metal universal door switch. Single 6.3mm blade terminal (circuit completes through switch body). Plunger length 11mm, 22mm between fixing holes. | 3.63 | ***081503*** |
| | Metal universal door switch as above, except plunger length 4.5mm. | 3.69 | ***081504*** |

## INDICATOR (3-WAY ON/OFF/ON) SWITCHES

| | Type | Each | Part No. |
|---|---|---|---|
| | Toggle switch. Black plastic knob, with 3 screw terminals. 5A@12V. 13mm fixing hole. | 2.55 | ***080901*** |
| | Toggle switch with turned aluminium lever. Single pole. Requires 13mm panel hole. Maximum panel thickness 2.5mm. Screw terminals. 6A@12V. | 3.54 | ***081702*** |

*contd...*

## INDICATOR (3-WAY ON/OFF/ON) SWITCHES *(contd)*

| Type | Each | Part No. |
|---|---|---|
| Metal toggle switch with plated lever. 6.3mm blade terminals. Requires 13mm panel hole. 16A@12V. | 3.63 | ***080103*** |
| Toggle switch with illuminated large green lever. Requires 18.5mm panel hole. Screw terminals. Supplied with 12V bulb. | 10.98 | ***080907*** |
| Rotary switch with black plastic lever and screw terminals. Requires 27mm panel hole. 6A@12V. (Matches switch 081004). | 10.19 | ***080905*** |
| As above but with illuminated green plastic lever. 6A@12V. | 11.29 | ***080902*** |
| Rotary switch with black plastic lever having an integral red warning lamp and screw terminals. Requires 26mm fixing hole. Requires BA7s bulb. Supplied with wiring diagram. Connection details - see page 91. | 13.86 | ***080906*** |
| Steering column mounted switch. 110mm stalk with illuminated green knob. Mounts on columns up to 40mm dia. 16A@12V. Supplied with bulb and wiring diagram. Connection details - see page 91. | 17.05 | ***080903*** |
| As above but with non-illumated black knob. | 14.37 | ***080904*** |
| Lucas SPB120 indicator switch. Cream plastic with integral red warning lamp. For mounting on dashboard surface. 46mm between mounting hole centres. | 35.62 | ***080908*** |
| Lucas SQB114 universal column switch. Mounts on columns up to 38mm dia., but can be adapted to fit bigger diameters. Switch consists of indicator switch (up/down), dip switch (back/front), and horn switch (pushing stalk). Supplied with 450mm of flying leads. | 44.55 | ***080910*** |



## HAZARD SWITCHES, ETC

| Type | Each | Part No. |
|---|---|---|
| Panel mounted push on hazard switch, with illuminated button. Requires 30mm panel hole. Supplied with wiring diagram. Connection details - see page 91. | 20.68 | ***081901*** |
| Connector plug for above (081901), including terminals (7 x 050203). | 1.39 | ***081902*** |
| Rocker hazard switch - see page 40. Connection details - see page 91. | 25.99 | ***081223*** |
| Lucas SFB300 Hazard Kit. Includes hazard flasher relay, switch (with illuminated knob), mounting brackets and instructions to enable hazard lights to be easily fitted to any vehicle with existing indicators. | 40.95 | ***081903*** |
| Rocker type hazard switch. Fits 37mm x 18mm aperture. Comes with wiring diagram. 7 x 4.8mm blade connections. Connection details - see page 92. | 6.65 | ***081904*** |
| This kit contains an illuminated rocker hazard switch combined with a hazard relay fixed on a common bracket. Negative or positive earth (by reversing relay connections). | 9.35 | ***081905*** |

## ROTARY SWITCHES

| Type | Each | Part No. |
|---|---|---|
| On/off, 2 position, water resistant, illuminated rotary switch. Comes complete with 3 different coloured lenses (red, amber, green) and bulb. Black knob. 15A@12V. Fixing hole 13mm. 6.3mm blade terminals. | 10.39 | ***081001*** |
| As above, but non-illuminated. | 7.52 | ***081005*** |
| Off/OnA/OnA+B/OnA+C, 4 position, water resistant, rotary switch. Black knob. 15A@12V. Fixing hole 13mm. 6.3mm blade terminals. | 10.45 | ***081002*** |
| Off/OnA/OnA+B. 3 position water resistant rotary switch. Black knob. 29A@12V. 6.3mm blade terminals. 13mm fixing hole. Suitable for light switch off/side/head. | 11.99 | ***081003*** |

*contd...*

## ROTARY SWITCHES *(contd)*

| Type | Each | Part No. |
|---|---|---|
| Connector plug for switches 081002 and 081003. Supplied with terminals. | 1.32 | ***081006*** |

| | | |
|---|---|---|
| Off/OnA/OnA+B/OnA+C. 4 position switch with black plastic lever and screw terminals. Requires 27mm panel hole. 11A@12V. (Matches switch 080905). | 14.08 | ***081004*** |

## KEY SWITCHES

| Type | Each | Part No. |
|---|---|---|
| On/Off. Double pole switch with metal key and 6.3mm blade terminals. Requires 12mm panel hole. 20A@12V. | 27.50 | ***081105*** |
| Replacement key for item 081105. | 1.95 | ***081106*** |

| | | |
|---|---|---|
| Off/on. 3 terminals, 18.5mm fixing hole, supplied with 2 keys. 6.3mm blade terminals. | 16.04 | ***081101*** |
| Off/ign/start. 5 terminals, 18.5mm fixing hole, supplied with 2 keys. 6.3mm blade terminals. | 20.49 | ***081102*** |
| Off/aux/ign/start. 4 terminals, 18.5mm fixing hole, supplied with 2 keys. 6.3mm blade terminals. | 20.25 | ***081103*** |

| | | |
|---|---|---|
| Replacement key for 081101, 081102 & 081103. | 3.25 | ***081107*** |

| | | |
|---|---|---|
| Parking/off/ign/side/main/dip. 7 terminals, fixing hole 26.5mm, supplied with 2 keys. 6.3mm blade terminals. | 24.75 | ***081104*** |

| | | |
|---|---|---|
| Lucas 128SA 35327 key switch. 4 position switch - off, aux/alt, aux/heater, aux/heater/start. Positions 3 and 4 spring load back to position 2. | 25.85 | ***081110*** |



## DIP SWITCHES

| Type | Each | Part No. |
|---|---|---|
| Change over, foot operated dip switch. Screw terminals. | 8.56 | ***081301*** |

| | | |
|---|---|---|
| Lucas 34790 dip switch. | 20.79 | ***081302*** |

| | | |
|---|---|---|
| Lucas 31284 foot operated dip switch. Connection via 3 x screw terminals. | 25.63 | ***081303*** |

## ROCKER SWITCHES

| Type | Each | Part No. |
|---|---|---|
| On/off. 2 x 6.3mm blade terminals. Case size 33 x 19mm. 10A@12V. 12.5mm fixing hole. | 1.62 | ***081201*** |

| | | |
|---|---|---|
| On/off. 4.8mm blade terminals. Snaps into panel hole 19.5 x 13mm. 10A@12V. | 1.62 | ***081202*** |

| | | |
|---|---|---|
| On/off with fluorescent indicator. 6.3mm blade terminals. Snaps into panel hole 30 x 11mm. 16A@12V. | 1.67 | ***081203*** |

| | | |
|---|---|---|
| On/off. 4.8mm blade terminals. Snaps into 20mm dia. panel hole. 10A@12V. | 1.65 | ***081204*** |
| As above but illuminated. Available in red or amber.<br>** Specify colour: Red -R, Amber -A* | 2.15 | ***081230-**** |

| | | |
|---|---|---|
| On/off with LED indication for on and 4.8mm blade terminals. Snaps into 20mm dia. panel hole. 10A@12V. | 2.99 | ***081205*** |
| On/off. Illuminated. 3 x 6.3mm blade terminals. Case size 33 x 19mm. 10A@12v. 12.5mm fixing hole. Available in blue, green, red or amber.<br>** Specify colour: Blue -U, Green -G, Red -R, Amber -A* | 1.76 | ***081206-**** |

*contd...*

## ROCKER SWITCHES *(contd)*

### Modular Rocker Switches

Switches that can be mounted individually or clipped together to form a switch panel. Available in all black or with a coloured panel that can be made to illuminate either when switch is 'switched' or, for example, when vehicle lights are turned on. Switch ratings are 15A @ 28V DC. To mount individual switches, the required panel cut out is 44 x 22mm. Supplied with wiring diagrams. (On) = momentarily on.

#### *Black*

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Off/On | 6.73 | ***081207*** |
| Off/(On) | 6.93 | ***081208*** |
| On/On | 7.24 | ***081209*** |
| On/Off/On | 8.73 | ***081210*** |
| (On)/Off/On | 7.94 | ***081211*** |
| (On)/Off/(On) | 8.73 | ***081212*** |
| Off/On A/On A+B | 10.82 | ***081213*** |

#### *Coloured Panel*

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Off/On | 9.17 | ***081214-**** |

** Specify colour: Blue -U, Green -G, Red -R, Amber -A*

#### *Specific (Back-Lit)*

| *Type* | | *Each* | *Part No.* |
|---|---|---|---|
| Wiper | Off/On/On | 16.95 | ***081215*** |
| Washer | Off/(On) | 10.52 | ***081216*** |
| Rear Screen Wiper | Off/On | 9.89 | ***081217*** |
| Lights | Off/On A/On A+B | 16.43 | ***081218*** |
| Side Lights | Off/On | 9.89 | ***081219*** |
| Front Fog | Off/On | 9.89 | ***081220*** |
| Rear Fog | Off/On | 9.89 | ***081221*** |
| Instrument Lights | Off/On | 9.89 | ***081222*** |
| Hazard Warning* | Off/On | 25.99 | ***081223*** |
| Fan | Off/On | 9.89 | ***081224*** |

** Connection details - see page 91.*

*081225*

*081226*

*081227*

Two types of mounting frames are available:- end frames and middle frames. All clip together. To make the panel shown would take two end frames and one middle frame. The required cut out per frame is 26 x 48mm. To aid connection to each switch a special moulded socket is available (supplied with all terminals).

| *Type* | *Each* | *Part No.* |
|---|---|---|
| End Frame | 3.17 | ***081225*** |
| Middle Frame | 3.17 | ***081226*** |
| Terminal Socket & Terminals | 3.17 | ***081227*** |
| Blanking Plate | 3.17 | ***081228*** |



## BRAKE LIGHT SWITCHES

### Mechanical

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Spring-loaded plunger. Can be pushed or pulled (switch closed at rest). Small hole in plunger shaft for attaching pulling wire if required. | 3.63 | ***081402*** |

| | | |
|---|---|---|
| Switch with spring and hook. Makes contact when spring is pulled. | 5.72 | ***081401*** |

| | | |
|---|---|---|
| Switch with spring and clamp. Can be mounted on a flat surface or clamped to a tube (up to 25mm dia). Makes contact when spring is pulled. | 6.72 | ***081403*** |

| | | |
|---|---|---|
| Rubber cover for 081401, 081402 & 081403. Protects terminals from ingress of moisture, etc. | 1.65 | ***081404*** |

| | | |
|---|---|---|
| Plunger switch with M10 x 1.25 fixing thread and two pairs of contacts. When plunger is pressed one pair make and the other pair break. 4 x 6.3mm blade terminals. | 9.98 | ***081408*** |

### Hydraulic (6.3mm blade connections)

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 1/8" x 27NPTF (Lucas SMB423). | 9.20 | ***081405*** |
| 3/8" x 24UNF (Lucas SPB401). | 9.75 | ***081406*** |
| M10 x 1 (Lucas SMB426). | 8.75 | ***081407*** |

## MISCELLANEOUS

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Lucas 78405 rheostat. Hexagonal shaft, 0-15 ohms resistance. 2 x 6.3mm blade terminals. | 37.50 | ***083001*** |

| | | |
|---|---|---|
| Universal in-line diode. 10A, 150V dc with male (-) and female (+) 6.3mm blade terminals. | 1.65 | ***082101*** |

# ACCESSORIES

## WARNING LAMPS

| Type | Each | Part No. |
|---|---|---|
| Warning lamp supplied with 12V, 2W, BA7s bulb. 6.3mm blade terminals. Needs 13mm panel hole. Available in blue, green, red or amber.<br>** Specify colour: Blue -U, Green -G, Red -R, Amber -A* | 2.31 | ***090101-**** |

| | | |
|---|---|---|
| Warning lamp supplied with 12V, 1.2W, mini capless bulb. 2.8mm blade terminals. Push fit into 10mm panel hole. Available in blue, green, red or amber.<br>** Specify colour: Blue -U, Green -G, Red -R, Amber -A* | 2.95 | ***090105-**** |

| | | |
|---|---|---|
| Large warning lamp. Needs 9mm BA9s bulb (2W max) and 17mm panel hole. 6.3mm blade terminals. Available in blue, green, red or amber.<br>** Specify colour: Blue -U, Green -G, Red -R, Amber -A* | 3.74 | ***090109-**** |

| | | |
|---|---|---|
| Older style warning lamp with turned aluminium bezel. Bezel diameter 22mm. Requires 17.5mm panel hole. Maximum panel thickness 10mm. Requires BA9s bulb (not supplied). 2 x screw terminals. Available in blue, green, red or amber.<br>** Specify colour: Blue -U, Green -G, Red -R, Amber -A* | 2.90 | ***090117-**** |

| | | |
|---|---|---|
| LED warning lamp. Push fit into 8.2mm hole. Supplied with 300mm leads. Polarity sensitive. Available in green, red, amber or red flashing.<br>** Specify colour: Green -G, Red -R, Amber -A, Red Flashing -RF* | 2.50 | ***090113-**** |

| | | |
|---|---|---|
| Red LED warning lamp with chrome surround. Fits into 8mm panel hole. | 3.42 | ***090118*** |

## CIGAR LIGHTERS & BRACKETS

| Type | Each | Part No. |
|---|---|---|
| Cigar lighter, illuminated. Requires 25mm panel hole. Suitable for dashboard mounting. Connection via 2 x 6.3mm blade terminals. | 9.13 | ***090205*** |
| As above, but non-illuminated. | 8.25 | ***090204*** |

| Type | Each | Part No. |
|---|---|---|
| Cigar lighter socket only. Non-illuminated. Requires 28mm panel hole. | 4.07 | ***090206*** |

| | | |
|---|---|---|
| Cigar lighter plug. Fits most cigar lighter sockets with red adapter (supplied) in place. Without red adapter, fits standard DIN socket. Has an internal fuse of 8A. | 3.85 | ***090202*** |

| | | |
|---|---|---|
| Cigar lighter plug with integral replaceable fuse (supplied) and green LED to indicate power is on. | 1.96 | ***090207*** |

| | | |
|---|---|---|
| Bracket for under dashboard mounting of cigar lighters (090204 & 090205). Finished in black. | 0.66 | ***090203*** |

| | | |
|---|---|---|
| Cigar socket doubler. Cigar lighter plug supplying double socket via flexible cable. 10A max. | 16.43 | ***090208*** |

| | | |
|---|---|---|
| Cigar lighter plug extension lead. Coiled cable, 2.45m working length with standard lighter plug and socket. Rated at 5A @ 12V DC continuous. | 9.33 | ***090209*** |

## DIN SOCKETS & PLUGS

| Type | Each | Part No. |
|---|---|---|
| DIN panel socket. Requires 16mm hole. 16A maximum. | 4.38 | ***090301*** |

| | | |
|---|---|---|
| DIN socket with spring loaded cap. Requires 18mm hole. 2 x 6.3mm blade terminals. 16A maximum. | 6.12 | ***090305*** |

| | | |
|---|---|---|
| DIN surface mount socket. Supplied with fixing screws. 16A maximum. | 6.32 | ***090302*** |

| | | |
|---|---|---|
| Triple DIN Socket. 3 sockets mounted on a panel. Hole required 70 x 20mm. Supplied with fixing screws. 16A maximum. | 12.16 | ***090303*** |

| | | |
|---|---|---|
| DIN plug. To fit all of above DIN sockets. 16A maximum. | 3.37 | ***090304*** |

## JUNCTION BOXES

| Type | Each | Part No. |
|---|---|---|
| 4-way circular junction box. 4 screw terminals. 57mm diameter. Lid with retaining screw. | 3.26 | ***090601*** |

| | | |
|---|---|---|
| An 8-way junction box with rubber body and a clear plastic cover. The body has four waterproof cable glands. W110 x D90 x H41mm. Supplied with mounting bolts. | 12.10 | ***090501*** |

| | | |
|---|---|---|
| Lucas plastic junction box with removable lid and integral seal. 10 screw terminals. 90mm x 68mm. Four cable entry points. | 6.82 | ***090603*** |

Junction box with black phenolic body and lid. Waterproof cable glands at each end. Lid secured by knurled nut and sealed by a waterproof gasket. Can accept cables up to 6mm². Screw connections. W125 x D73 x H25mm.

| Way | Each | Part No. |
|---|---|---|
| 6 | 11.00 | ***090401*** |
| 12 | 14.08 | ***090402*** |

# FUSING

## FUSE BOXES

### Continental Type

Available in 2, 4, 6, 8 and 12 way. Moulded phenol base and cover (held on with thumb screw). Available with clear or black cover. Screw terminals. Supplied with 8A continental fuses.

| Way | Each | Part No. |
|---|---|---|
| 2 | 4.27 | ***100101-**** |
| 4 | 5.71 | ***100102-**** |
| 6 | 8.32 | ***100103-**** |
| 8 | 11.67 | ***100104-**** |
| 12 | 15.56 | ***100112-**** |

** Specify colour: Clear -C, Black -B*

Connector bridges for the above range of fuse boxes. Useful for joining a number of terminals together.

| Type | Each | 10 | Part No. |
|---|---|---|---|
| 2-way | 0.77 | 6.54 | ***100121*** |
| 3-way | 1.20 | 10.20 | ***100122*** |
| 4-way | 1.25 | 10.87 | ***100123*** |
| 6-way | 1.32 | 11.22 | ***100124*** |

High quality Bosch manufactured fuse boxes. Moulded black phenol base with black clip-on cover. Supplied with 8A continental fuses.

| Way | Each | Part No. |
|---|---|---|
| 2 | 5.24 | ***100113*** |
| 4 | 7.46 | ***100114*** |

### Blade Fuse Type

Surface mounted fuse box for blade type fuses. Available in 4 or 6 way. Black moulded base and transparent cover. Connection via 6.3 mm blade terminals on underside. Supplied without fuses.

| Way | Dimensions (mm) | Each | Part No. |
|---|---|---|---|
| 4 | H58 x W52 x D26 | 2.42 | ***100105*** |
| 6 | H58 x W72 x D26 | 2.86 | ***100106*** |

Surface mounted fuse box for blade type fuses. Available in 4, 6 or 8 way. Black moulded base, transparent cover and gasket. Connection via 6.3mm blade terminals on each side of fuse box. Supplied without fuses.

| Way | Dimensions (mm) | Each | Part No. |
|---|---|---|---|
| 4 | H36 x W79 x D26 | 3.05 | ***100107*** |
| 6 | H36 x W100 x D26 | 4.47 | ***100108*** |
| 8 | H36 x W115 x D26 | 5.85 | ***100109*** |

| Type | Each | Part No. |
|---|---|---|
| Surface mounted 16 way blade type fuse box. Black moulded base and transparent cover. Comes with terminals & terminal locking bar. Terminals are crimped onto wires and then inserted into base of fusebox. Supplied without fuses. These fuse boxes can be clipped together to form 32 or 48 way units, and to relay box 140304. (H64 x W123 x D42mm). | 16.89 | ***100110*** |

| | | |
|---|---|---|
| Panel mounted 8 way blade type fuse box. Black with transparent cover and gasket. Designed to fit through a panel aperture. 6.3mm blade connections on underside of box. Supplied without fuses. (H42 x W88 x D32mm). | 5.41 | ***100111*** |

### Lucas Fuse Boxes

| | | |
|---|---|---|
| SF4. Surface mounted 4-way fuse box. Accepts four glass fuses. Connections via screw terminals. Phenol lid held on with knurled screw. Has space for 2 spare fuses. | 42.00 | ***100116*** |
| Replica version of above Lucas SF4. Almost indistinguishable. | 19.20 | ***100126*** |

*contd...*

## FUSE BOXES *(contd)*

### Lucas Fuse Boxes *(contd)*

| | *Type* | *Each* | *Part No.* |
|---|---|---|---|
| | SF6 (37132). Surface mounted 2-way fuse box. Accepts two glass fuses. Connections via screw terminals. No cover. Has space for 2 spare fuses. | 20.35 | ***100117*** |
| | 4FJ (54038068). Surface mounted 2-way fuse box with detachable cover. Accepts glass fuses. Connections via 6.3mm blade terminals. Has space for two spare fuses. | 8.80 | ***100118*** |
| | 6FJ (37409). Panel mounted 4-way fuse box with detachable cover. Accepts glass fuses. Connections via 6.3mm blade terminals on underside. Link between terminals 1 & 3 on underside. Suitable for mounting through a bulkhead. Has space for two spare fuses. | 21.88 | ***100119*** |
| *Picture as above* | 6FJ (37564). Panel mounted 4-way fuse box with detachable cover. Accepts glass fuses. Connections via 6.3mm blade terminals. Link between terminals 5 & 7 on underside. Suitable for mounting through a bulkhead. | 21.88 | ***100125*** |
| | 7FJ (37420). Surface mounted 4-way fuse box with detachable cover. Accepts glass fuses. Connections via side mounted 6.3mm blade terminals. Has space for two spare fuses. | 23.15 | ***100120*** |

## SINGLE FUSE HOLDERS

| | *Type* | *Each* | *Part No.* |
|---|---|---|---|
| | For continental fuses. Moulded in black phenol. Bayonet fixing with screw terminals. Supplied with 8A fuse. | 0.65 | ***100201*** |
| | For continental fuses. Moulded in black phenol. Bayonet fixing with 6.3mm blade terminals. Supplied with 8A fuse. | 0.78 | ***100202*** |
| | For 30mm glass fuses, supplied with flying leads. Moulded in white nylon. Bayonet fixing. No fuse supplied. Current capacity 8A. | 0.71 | ***100214*** |
| | As above, but current capacity 17A. | 0.74 | ***100203*** |
| | For 30mm glass fuses. Moulded in black phenol. Screw cable connections. Supplied with 35A fuse. | 2.19 | ***100204*** |



| | *Type* | *Each* | *Part No.* |
|---|---|---|---|
| | Panel mounted fuse holder for 30mm glass fuses up to 35A. Requires 16mm diameter hole. Has 4.8mm blade connections. Screw on cap retains fuse. | 4.10 | ***100205*** |
| | Splash proof in-line fuse holder for 30mm fuses up to 20A. Has PVC grommets and O ring. Nickel plated brass screw connections. | 3.40 | ***100206*** |
| | Blade fuse holder. Can be clipped together to form a fuse block. 6.3mm blade connections on each side. Requires mounting plate (100210) to fix it to a surface. | 0.74 | ***100207*** |
| | Blade fuse holder. Can be clipped together to form a fuse block. 6.3mm blade connectors in base. Requires mounting plate (100210) to fix it to a surface. | 0.70 | ***100208*** |
| | Transparent push-on cover for above (100208). | 0.19 | ***100209*** |
| | Mounting plate for above (100208). | 0.23 | ***100210*** |
| | Panel mounted blade fuse holder. Requires mounting hole 22 x 11mm. 6.3mm blade terminals. 30A max. | 1.01 | ***100211*** |
| | Blade fuse holder on flying leads. Current rating 30A. | 1.99 | ***100212*** |
| | 'Add a Circuit' blade fuse holder. This item can be used to gain another fused circuit when used to replace an existing fuse within a fuse box. | 7.22 | ***100215*** |
| *Picture as above* | 'Add a Circuit' mini blade fuse holder. Same as above item but for mini blade fuses. | 7.22 | ***100216*** |
| | Strip fuse holder. Cable connections are made using the protruding M5 studs. Moulded in black plastic. Supplied without fuse. | 2.10 | ***100213*** |

## FUSES *(kits also available - see page 85)*

### Standard Blade Fuses

| Cont. Rating (A) | Fusing (A) | Colour | Each | 50 | Part No. |
|---|---|---|---|---|---|
| 1 | 2 | Black | 0.15 | 3.90 | **100301** |
| 2 | 4 | Grey | 0.15 | 3.90 | **100302** |
| 3 | 6 | Violet | 0.15 | 3.90 | **100303** |
| 4 | 8 | Pink | 0.15 | 3.90 | **100304** |
| 5 | 10 | Tan | 0.15 | 3.90 | **100305** |
| 7.5 | 15 | Brown | 0.15 | 3.90 | **100306** |
| 10 | 20 | Red | 0.15 | 3.90 | **100307** |
| 15 | 30 | Blue | 0.15 | 3.90 | **100308** |
| 20 | 40 | Yellow | 0.15 | 3.90 | **100309** |
| 25 | 50 | Natural | 0.15 | 3.90 | **100310** |
| 30 | 60 | Green | 0.15 | 3.90 | **100311** |
| 40 | 80 | Orange | 0.15 | 3.90 | **100312** |

### Blade Fuse Extractor

| | Each | Part No. |
|---|---|---|
| Makes extracting blade fuses easier. | 0.35 | **100701** |

### Mini Blade Fuses

| Cont. Rating (A) | Fusing (A) | Colour | Each | 50 | Part No. |
|---|---|---|---|---|---|
| 2 | 4 | Grey | 0.18 | 6.90 | **101101** |
| 3 | 6 | Violet | 0.18 | 6.90 | **101102** |
| 4 | 8 | Pink | 0.18 | 6.90 | **101103** |
| 5 | 10 | Tan | 0.18 | 6.90 | **101104** |
| 7.5 | 15 | Brown | 0.18 | 6.90 | **101105** |
| 10 | 20 | Red | 0.18 | 6.90 | **101106** |
| 15 | 30 | Blue | 0.18 | 6.90 | **101107** |
| 20 | 40 | Yellow | 0.18 | 6.90 | **101108** |
| 25 | 50 | Neutral | 0.18 | 6.90 | **101109** |
| 30 | 60 | Green | 0.18 | 6.90 | **101110** |

### Continental Fuses

| Cont. Rating (A) | Fusing (A) | Colour | Each | 50 | Part No. |
|---|---|---|---|---|---|
| 5 | 10 | Yellow | 0.15 | 3.70 | **100401** |
| 8 | 16 | White | 0.15 | 3.70 | **100402** |
| 16 | 32 | Red | 0.15 | 3.70 | **100403** |
| 25 | 50 | Blue | 0.15 | 3.70 | **100404** |

### Glass Fuses (30mm x 6.3mm)

| Cont. Rating (A) | Fusing (A) | Each | 50 | Part No. |
|---|---|---|---|---|
| 1 | 2 | 0.15 | 3.80 | **100501** |
| 2.5 | 5 | 0.15 | 3.80 | **100502** |
| 5 | 10 | 0.15 | 3.80 | **100503** |
| 7.5 | 15 | 0.15 | 3.80 | **100504** |
| 10 | 20 | 0.15 | 3.80 | **100505** |
| 12.5 | 25 | 0.15 | 3.80 | **100506** |
| 15 | 30 | 0.15 | 3.80 | **100507** |
| 25 | 50 | 0.15 | 3.80 | **100508** |

### Strip Fuses

| Cont. Rating (A) | Fusing (A) | Each | 10 | Part No. |
|---|---|---|---|---|
| 30 | 60 | 0.30 | 2.38 | **100601** |
| 40 | 80 | 0.30 | 2.38 | **100602** |
| 50 | 100 | 0.30 | 2.38 | **100603** |
| 60 | 120 | 0.30 | 2.38 | **100604** |
| 80 | 160 | 0.30 | 2.38 | **100605** |
| 100 | 200 | 0.30 | 2.38 | **100606** |

## CIRCUIT BREAKERS

### Blade Type

Circuit breakers for 12/24V DC systems. Thermal bi-metallic with manual reset and trip. Replace standard blade fuses in many fuse holders and boxes.

| Rating (A) | Each | Part No. |
|---|---|---|
| 6 | 14.54 | **100801** |
| 8 | 14.54 | **100802** |
| 10 | 14.54 | **100803** |
| 15 | 14.54 | **100804** |
| 20 | 14.54 | **100805** |
| 25 | 14.54 | **100806** |

### Panel Mounted

Circuit breakers for 12/24V DC systems. Thermal bi-metallic with manual reset. 2 x screw terminals. Panel mounted in 12mm diameter hole.

| Rating (A) | Each | Part No. |
|---|---|---|
| 20 | 19.52 | **100901** |
| 30 | 19.52 | **100902** |
| 40 | 19.52 | **100903** |
| 50 | 19.52 | **100904** |
| 60 | 19.52 | **100905** |
| 70 | 19.52 | **100906** |

# CABLE SLEEVING

### SPIRAL BINDING

An easy and quick way of bundling and protecting cables. It also has the advantage that it can be put on cables whilst in situ. Made from black low density polyethylene (LDPE) with an operating temperature range of -60ºC to +50ºC.

| Dia. (mm) | Wall Thickness (mm) | Bundle Dia. (mm) | m | 25m | Part No. |
|---|---|---|---|---|---|
| 3.0 | 0.75 | 1.5-7 | 0.28 | 5.50 | **110103** |
| 6.0 | 1.0 | 5-20 | 0.45 | 9.00 | **110101** |
| 12.0 | 1.5 | 10-40 | 0.75 | 15.00 | **110102** |

## CONVOLUTED SLEEVING

Black polyamide convoluted sleeving for bundling and protection of wiring. Operating temp. -40ºC to +120ºC. Self extinguishing. Petrol, oil and water resistant.

| Internal Dia. (mm) | External Dia. (mm) | m | 10m | Part No. |
|---|---|---|---|---|
| 6.5 | 10.0 | 0.48 | 4.44 | **110401** |
| 10.0 | 13.0 | 0.60 | 5.45 | **110406** |
| 12.7 | 16.1 | 0.73 | 6.68 | **110402** |
| 16.7 | 21.2 | 0.75 | 6.88 | **110403** |
| 21.4 | 25.4 | 0.82 | 7.42 | **110407** |
| 27.9 | 34.5 | 1.21 | 10.89 | **110408** |

## PVC SLEEVING

General purpose black PVC sleeving for bundling and protection of cables. Water, oil and petrol resistant. Operating temperature -20ºC to +70ºC.

| Int. Dia. (mm) | Wall Thickness (mm) | m | 25m | Part No. |
|---|---|---|---|---|
| 4 | 0.5 | 0.23 | 3.59 | **110201** |
| 5 | 0.5 | 0.29 | 4.47 | **110202** |
| 6 | 0.5 | 0.32 | 5.02 | **110203** |
| 8 | 0.5 | 0.37 | 5.95 | **110204** |
| 10 | 0.5 | 0.43 | 8.32 | **110205** |
| 12 | 0.5 | 0.58 | 12.24 | **110206** |
| 14 | 0.5 | 0.69 | 14.73 | **110207** |
| 16 | 0.5 | 0.81 | 17.17 | **110208** |
| 20 | 1.0 | 0.92 | 19.64 | **110209** |
| 25 | 1.0 | 1.09 | 23.07 | **110210** |

## HEAT SHRINK SLEEVING

Commercial grade polyolefin heat shrink tubing. Available in black or red. Operating temperature -55ºC to +125ºC. Shrink ratio of 2:1. Can be shrunk using a standard hot air gun.

| Int. Dia. before Heating (mm) | Int. Dia. after Heating (mm) | m | 5m | Part No. |
|---|---|---|---|---|
| 3.2 | 1.6 | 0.59 | 2.50 | **110301-*** |
| 4.8 | 2.4 | 0.71 | 3.03 | **110302-*** |
| 6.4 | 3.2 | 0.91 | 3.89 | **110303-*** |
| 9.6 | 4.8 | 1.01 | 4.28 | **110304-*** |
| 12.8 | 6.4 | 1.24 | 5.27 | **110305-*** |
| 19.0 | 9.5 | 1.95 | 8.30 | **110306-*** |
| 25.4** | 12.7 | 2.53 | 10.75 | **110307** |
| 38.2** | 19.1 | 6.18 | 26.25 | **110308** |

***Only available in black* ** Specify colour: Black -B, Red -R*

Heatshrink selection pack. One metre each of 110301 to 110306, in black or red. Each 5.50 **110309-***

** Specify colour: Black -B, Red -R*

## EXPANDABLE BRAIDED SLEEVING

Made from black polyester which, because of its woven construction, expands readily to fit a range of cable bundle diameters. Cables can also be routed out through the sleeving wall. It has very good abrasion resistance, and has a temperature range of -70ºC to +150ºC. To stop fraying, the cut end should be fused using a soldering iron, or covered using heatshrink tubing or neoprene sleeves.

| Min Dia. (mm) | Max Dia. (mm) | m | 10m | Part No. |
|---|---|---|---|---|
| 3 | 7 | 0.62 | 5.54 | **110701** |
| 5 | 10 | 0.86 | 7.72 | **110702** |
| 10 | 18 | 1.50 | 13.46 | **110703** |
| 15 | 27 | 1.61 | 14.45 | **110704** |

## TEMPERATURE RESISTANT SLEEVING

Woven material lacquered with polyurethane. Temperature resistant to 155ºC. Natural colour.

| Int. Dia. (mm) | | m | Part No. |
|---|---|---|---|
| 1 | | 0.52 | **110801** |
| 2 | | 0.63 | **110802** |
| 4 | | 1.11 | **110803** |
| 6 | *(only supplied in 1m lengths)* | 1.56 | **110804** |
| 8 | *(only supplied in 1m lengths)* | 1.99 | **110805** |

## NEOPRENE SLEEVES

Used for insulating and finishing non-insulated terminals. Sleeves are pre-lubricated and applied using special application tool (150102, page 87). Sleeve colour is black. Operating temperature range -65ºC to +130ºC.

| Length (mm) | Wall Thickness (mm) | Bore Dia. (mm) | Max Cable Dia. (mm) | 100 | Part No. |
|---|---|---|---|---|---|
| 20 | 0.75 | 1.5 | 3.0 | 2.66 | **110506** |
| 20 | 0.75 | 2.0 | 4.0 | 3.10 | **110507** |
| 20 | 0.75 | 3.0 | 6.0 | 2.38 | **110508** |
| 25 | 1.0 | 5.0 | 10.0 | 8.05 | **110509** |
| 25 | 1.25 | 7.5 | 15.0 | 5.61 | **110510** |

## CABLE MARKERS

### Clip On

Available in 3 sizes in handy packs. Useful for marking cable after termination as markers are simply clipped on the side of the cable. Packs contain equal numbers of 0, 1, 2, 3, 4, 5, 6, 7, 8 & 9. Each number is a different colour.

| Cable OD (mm) | Pack size | Each | Part No. |
|---|---|---|---|
| 2.0-2.8 | 200 | 8.12 | **110902** |
| 2.8-3.8 | 200 | 8.25 | **110903** |
| 4.3-5.3 | 100 | 4.16 | **110904** |

*contd...*

## CABLE MARKERS *(contd)*

### Heat Shrink

Manufactured from white heat-shrink with black text. Shrink ratio of 3:1 when heated above 120ºC. Sold in assorted bags of 100, each bag having 10 of 0, 1, 2, 3, 4, 5, 6, 7, 8, & 9.

| *Initial Size (mm)* | *Min. Size after Heating (mm)* | *Each* | *Part No.* |
|---|---|---|---|
| 6 | 2 | 5.93 | ***110901*** |
| 12 | 4 | 7.78 | ***060901*** |

### Slide On

Made from coloured PVC. Designed for easy fitting without tools. Fit cables from 2-5mm in diameter. 500 markers per pack, approximately 50 each of 0, 1, 2, 3, 4, 5, 6, 7, 8 & 9.

| *Each* | *Part No.* |
|---|---|
| 8.10 | ***110905*** |

# CABLE FIXING

## P CLIPS

### Black Nylon *(kit also available - see page 86)*

Fixing hole 4.6mm

| *Internal Dia. (mm)* | *10* | *50* | *Part No.* |
|---|---|---|---|
| 3.2 | 0.43 | 1.83 | ***120101*** |
| 4.8 | 0.44 | 1.87 | ***120102*** |
| 6.4 | 0.47 | 2.01 | ***120103*** |
| 7.9 | 0.52 | 2.20 | ***120104*** |
| 9.5 | 0.55 | 2.34 | ***120105*** |
| 12.7 | 0.68 | 2.90 | ***120106*** |
| 15.8 | 0.79 | 3.37 | ***120107*** |
| 19.4 | 1.04 | 4.44 | ***120108*** |
| 25.4 | 1.20 | 5.09 | ***120109*** |
| 31.8 | 1.42 | 6.03 | ***120110*** |

### Steel *(kit also available - see page 86)*

Black rubber covered steel P-clips. Rubber covering helps protect against chafing, etc. Fixing hole 6.8mm.

| *Internal Dia. (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| 3.2 | 0.21 | 1.78 | ***120301*** |
| 4.8 | 0.23 | 1.97 | ***120302*** |
| 6.4 | 0.24 | 2.06 | ***120303*** |
| 7.9 | 0.25 | 2.16 | ***120304*** |
| 9.5 | 0.26 | 2.24 | ***120305*** |
| 12.7 | 0.33 | 2.81 | ***120306*** |
| 15.9 | 0.36 | 3.09 | ***120307*** |
| 19.0 | 0.44 | 3.74 | ***120308*** |
| 22.2 | 0.47 | 4.03 | ***120309*** |
| 25.4 | 0.51 | 4.30 | ***120310*** |

### Brass *(kit also available - see page 85)*

| *Internal Dia. (mm)* | *Fixing Hole (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 5.0 | 3.2 | 0.31 | 2.62 | ***120401*** |
| 10.0 | 4.2 | 0.47 | 4.03 | ***120402*** |
| 15.0 | 5.0 | 0.46 | 3.93 | ***120403*** |
| 20.0 | 6.4 | 0.48 | 4.11 | ***120404*** |
| 22.0 | 5.0 | 0.65 | 5.52 | ***120405*** |
| 25.0 | 5.0 | 0.97 | 8.23 | ***120406*** |

### Aluminium

Black rubber covered aluminium P-clips. Fixing hole 5.2mm.

| *Internal Dia. (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|
| 4.8 | 0.71 | 6.03 | ***120201*** |
| 6.4 | 0.75 | 6.38 | ***120202*** |
| 7.9 | 0.76 | 6.46 | ***120203*** |
| 9.5 | 0.80 | 6.80 | ***120204*** |
| 12.7 | 0.92 | 7.82 | ***120205*** |
| 15.9 | 0.98 | 8.33 | ***120206*** |
| 19.1 | 1.10 | 9.35 | ***120207*** |
| 22.2 | 1.20 | 10.20 | ***120208*** |
| 25.4 | 1.26 | 10.71 | ***120209*** |

## CHASSIS CLIPS

### Clip-On (Large)

Plated steel, 12.7mm wide. Simply clip on to chassis.

| *Length (mm)* | *Max Cable Dia. (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 42 | 6.5 | 0.67 | 5.71 | ***120501*** |
| 52 | 5.5 | 0.45 | 3.84 | ***120502*** |
| 57 | 5.5 | 0.49 | 4.21 | ***120503*** |
| 44 | 6.5 | 0.45 | 3.84 | ***120504*** |
| 39 | 10.0 | 0.36 | 3.09 | ***120505*** |

### Clip-On (Small)

Plated steel. Simply clip on to chassis. Available for two chassis thicknesses.

| *Chassis thickness (mm)* | *Cable dia. (mm)* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 2-4 | 6-7 | 0.44 | 3.74 | ***120506*** |
| 2-4 | 8-9 | 0.45 | 3.84 | ***120507*** |
| 2-4 | 10-11 | 0.45 | 3.84 | ***120508*** |
| 2-4 | 12-14 | 0.47 | 4.03 | ***120509*** |
| 4-7 | 6-7 | 0.44 | 3.74 | ***120510*** |
| 4-7 | 8-9 | 0.45 | 3.84 | ***120511*** |
| 4-7 | 10-11 | 0.45 | 3.84 | ***120512*** |
| 4-7 | 12-14 | 0.47 | 4.03 | ***120513*** |

### Bolt On

Plated steel with a hole to bolt on to chassis.

| *Max Cable O/D (mm)* | *Hole Dia. (mm)* | *10* | *25* | *Part No.* |
|---|---|---|---|---|
| 3 | 5 | 1.76 | 3.74 | ***120601*** |
| 5 | 6.3 | 1.76 | 3.74 | ***120602*** |
| 8 | 5 | 1.76 | 3.74 | ***120603*** |
| 10 | 5 | 1.76 | 3.74 | ***120604*** |
| 12 | 5 | 1.76 | 3.74 | ***120605*** |
| 15 | 5 | 1.87 | 3.97 | ***120606*** |

## CHASSIS CLIPS *(contd)*

### Saddle Clips

Plated steel with 2 x 4mm mounting holes.

| Max Cable Size | Mounting Hole Centre Dist. (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 6mm OD | 20 | 0.17 | 1.32 | ***121901*** |
| 12.7 x 6.35mm | 26 | 0.20 | 1.65 | ***121902*** |

### Self Adhesive

Nylon cable mounting clips with a self adhesive base. Suitable for fixing round or flat cables. Natural colour nylon.

| Max Cable Dia. (mm) | Base Size (mm) | Each | 10 | Part No. |
|---|---|---|---|---|
| 3.8 | 16 x 16 | 0.17 | 1.41 | ***120701*** |
| 7.7 | 25 x 25 | 0.21 | 1.78 | ***120702*** |
| 12.0 | 28 x 28 | 0.24 | 2.06 | ***120703*** |

Aluminium self adhesive cable mounting clips. Two sizes available.

| Max Cable Dia. (mm) | Base Size (mm) | 10 | 25 | Part No. |
|---|---|---|---|---|
| 6.0 | 11 x 16 | 0.94 | 1.99 | ***120704*** |
| 9.5 | 16 x 19 | 1.33 | 2.83 | ***120705*** |

## CABLE TIES

### Black Nylon

| Length (mm) | Width (mm) | 10 | 100 | Part No. |
|---|---|---|---|---|
| 102 | 2.5 | 0.23 | 0.66 | ***120801*** |
| 150 | 3.6 | 0.27 | 1.38 | ***120804*** |
| 165 | 2.5 | 0.28 | 1.39 | ***120802*** |
| 190 | 4.8 | 0.44 | 2.20 | ***120806*** |
| 200 | 2.5 | 0.32 | 1.62 | ***120803*** |
| 240 | 7.6 | 0.92 | 5.31 | ***120809*** |
| 292 | 3.6 | 0.65 | 3.46 | ***120805*** |
| 368 | 4.8 | 0.69 | 4.62 | ***120807*** |
| 380 | 7.6 | 1.83 | 9.13 | ***120810*** |
| 450 | 4.8 | 1.39 | 9.24 | ***120808*** |

### White Nylon with Marker Plate

| Length (mm) | Width (mm) | 10 | 100 | Part No. |
|---|---|---|---|---|
| 100 | 2.5 | 0.85 | 4.24 | ***120901*** |

## BUCKLE CLIPS

Useful for securing looms and cables where a period look is preferred.

| Size (mm) | Material | Each | 10 | Part No. |
|---|---|---|---|---|
| 102 x 6 | Aluminium | 0.35 | 3.25 | ***121801*** |
| 178 x 8 | Aluminium | 0.46 | 3.93 | ***121802*** |
| 178 x 8 | Brass | 0.76 | 6.46 | ***121804*** |



## CABLE TIE MOUNTS

### Self-Adhesive

| Type | Each | 25 | Part No. |
|---|---|---|---|
| Four-way self adhesive mount. Max. width of cable ties 3.2mm. Mount size 21 x 21mm. Made from black plastic. Also has fixing hole. | 0.15 | 1.76 | ***121001*** |

| | | | |
|---|---|---|---|
| Two-way self adhesive mount. Max. width of cable ties 4.8mm. Mount size 25 x 25mm. Made from black plastic. Also has fixing hole. | 0.18 | 3.60 | ***121002*** |

### Cable Tie Eyelets

Made from black nylon.

| Max. cable tie width (mm) | Type | 10 | 25 | Part No. |
|---|---|---|---|---|
| 4.8 | 1 | 0.77 | 1.65 | ***121003*** |
| 9.0 | 1 | 0.99 | 2.09 | ***121004*** |
| 4.8 | 2 | 0.77 | 1.65 | ***121005*** |

## GROMMETS

### Wiring Grommets *(kit also available - see page 85)*

Black PVC, slot width 1.6mm.

| Panel Hole Size (mm) | Grommet OD (mm) | Grommet ID (mm) | Each | 10 | 25 | Part No. |
|---|---|---|---|---|---|---|
| 6.4 | 9.5 | 4.0 | - | 0.40 | 0.70 | ***121101*** |
| 7.9 | 11.0 | 5.5 | - | 0.45 | 0.80 | ***121102*** |
| 9.3 | 13.4 | 7.7 | - | 0.50 | 0.90 | ***121103*** |
| 12.3 | 16.2 | 9.5 | - | 0.65 | 1.15 | ***121104*** |
| 15.8 | 19.0 | 12.0 | - | 0.90 | 1.65 | ***121105*** |
| 20.2 | 23.0 | 15.8 | - | 1.55 | 2.85 | ***121106*** |
| 25.0 | 29.2 | 19.5 | - | 1.70 | 3.40 | ***121107*** |
| 31.0 | 38.1 | 24.0 | 0.25 | 1.76 | - | ***121108*** |
| 37.4 | 46.0 | 31.5 | 0.49 | 3.11 | - | ***121109*** |
| 50.5 | 60.3 | 44.5 | 0.57 | 4.37 | - | ***121110*** |

### Blanking Grommets *(kit also available - see page 85)*

Black PVC, slot width 1.6mm.

| Panel Hole Size (mm) | Grommet OD (mm) | Each | 10 | 25 | Part No. |
|---|---|---|---|---|---|
| 6.4 | 8.5 | - | 0.61 | 1.20 | ***121201*** |
| 9.3 | 13.4 | - | 0.72 | 1.35 | ***121202*** |
| 12.3 | 16.2 | - | 0.85 | 1.49 | ***121203*** |
| 15.8 | 19.0 | - | 1.00 | 1.78 | ***121204*** |
| 20.0 | 24.2 | - | 1.40 | 2.43 | ***121205*** |
| 25.0 | 29.2 | - | 1.64 | 2.86 | ***121206*** |
| 31.7 | 38.1 | 0.31 | 1.98 | - | ***121207*** |
| 37.7 | 44.4 | 0.51 | 3.50 | - | ***121208*** |
| 50.5 | 57.2 | 0.81 | 5.68 | - | ***121209*** |

## GROMMET STRIP

### Natural Coloured

Ideal for irregular shaped openings. Made from natural coloured polythene. Available for three different panel thicknesses.

| *Panel thickness (mm)* | *m* | *5m* | *Part No.* |
|---|---|---|---|
| 1.0-1.3 | 0.70 | 3.30 | ***121111*** |
| 1.3-2.1 | 0.79 | 3.70 | ***121112*** |
| 2.1-3.3 | 0.81 | 3.81 | ***121113*** |

### Black

| *m* | *5m* | *Part No.* |
|---|---|---|
| 0.79 | 3.70 | ***121114*** |

Grommet strip made from black PVC, which has excellent flexibility, a temperature range from -65 to 105 deg C and is self extinguising. Suitable for panel thicknesses from 1-1.6mm.

## TAPE

### PVC Tape

Self adhesive PVC tape. Temp. range 0ºC to +70ºC. Thickness 0.13mm.

| *Width (mm)* | *Length (m)* | *Colour* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 19 | 20 | Black | 0.85 | 7.52 | ***121301*** |
| 19 | 20 | Red | 0.85 | 7.52 | ***121302*** |
| 19 | 20 | Green | 0.85 | 7.52 | ***121303*** |
| 19 | 20 | Blue | 0.85 | 7.52 | ***121304*** |
| 19 | 20 | Yellow | 0.85 | 7.52 | ***121305*** |
| 19 | 20 | Brown | 0.85 | 7.52 | ***121306*** |
| 19 | 20 | White | 0.85 | 7.52 | ***121307*** |

### PVC Harness Tape

Non adhesive PVC tape used for wrapping wiring looms to protect against abrasion, etc. Flame retardent. Operating temp. 0ºC to +90ºC. Thickness 0.13mm.

| *Width (mm)* | *Length (m)* | *Colour* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 19 | 20 | Black | 1.39 | 11.78 | ***121401*** |
| 25 | 20 | Black | 1.76 | 14.96 | ***121402*** |
| 22 | 20 | Blue | 1.54 | 13.09 | ***121403*** |
| 22 | 20 | Yellow | 1.54 | 13.09 | ***121404*** |

### Self Amalgamating Tape

| *Each* | *Part No.* |
|---|---|
| 7.15 | ***121501*** |

Strong self amalgamating polyisobutylene elastic tape which, when wrapped onto itself, will amalgamate creating a water-tight seal. Operating temp. -95ºC to +90ºC. Thickness 0.5mm. 25mm wide, 10m long.

### Cloth Insulating Tape

| | *Part No.* |
|---|---|
| 4.24 | ***121601*** |

An old-style electrical tape useful for insulation and harness wrapping. Black cotton with a natural rubber adhesive. 19mm x 20m long. 0.35mm thick.



# BULBS & BULB HOLDERS

## PANEL BULB

Replacement bulb for part numbers 081214 - 081224 inclusive. "Cap" dimensions 2mm x 4.6mm.

| *Volts* | *Watts* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|
| 12 | 1.2 | 0.43 | 3.64 | ***132201*** |

## MES MINIATURE SCREW IN

| *Volts* | *Watts* | *Filament* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 6 | 2 | Single | 0.45 | 3.87 | ***130104*** |
| 12 | 3 | Single | 0.45 | 3.87 | ***130102*** |
| 12 | 6 | Single | 0.45 | 3.87 | ***130105*** |

## BA7s MINIATURE BAYONET

Cap 7mm OD, single contact.

| *Volts* | *Watts* | *Filament* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 6 | 1.2 | Single | 0.52 | 4.41 | ***130201*** |
| 12 | 2 | Single | 0.50 | 4.19 | ***130202*** |

## BA9s MINUTE BAYONET

Cap 9mm OD, single contact.

| *Volts* | *Watts* | *Filament* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 6 | 3 | Single | 0.44 | 3.76 | ***130301*** |
| 12 | 2.2 | Single | 0.42 | 3.55 | ***130302*** |
| 12 | 4 | Single | 0.44 | 3.76 | ***130303*** |

## BA15s BAYONET

Cap 15mm OD, single contact.

### Small Globe

| *Volts* | *Watts* | *Filament* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 6 | 5 | Single | 0.45 | 3.87 | ***130401*** |
| 6 | 10 | Single | 0.45 | 3.87 | ***130402*** |
| 12 | 5 | Single | 0.43 | 3.65 | ***130403*** |
| 12 | 10 | Single | 0.43 | 3.65 | ***130404*** |
| 12 | 23 | Single | 0.57 | 4.84 | ***130405*** |

### Medium Globe

| *Volts* | *Watts* | *Filament* | *Each* | *10* | *Part No.* |
|---|---|---|---|---|---|
| 6 | 21 | Single | 0.48 | 4.08 | ***130501*** |
| 12 | 21 | Single | 0.45 | 3.87 | ***130502*** |
| 12 | 21 | Single (Amber) | 0.76 | 6.46 | ***130503*** |

*contd...*

## BA15s BAYONET *(contd)*

### Large Globe

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 12 | 36 | Single | | 1.68 | 14.30 | **130601** |
| 12 | 45 | Single | | 2.41 | 20.43 | **130602** |
| 12 | 50 | Single | (Halogen) | 3.67 | 31.19 | **130603** |

## BA15d BAYONET

Cap 15mm OD, double contact, parallel pins.

### Small Globe

| Volts | Watts | Filament | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 6 | 5 | Single | 0.48 | 4.08 | **130701** |
| 6 | 10 | Single | 0.57 | 4.84 | **130702** |
| 12 | 5 | Single | 0.48 | 4.08 | **130703** |
| 12 | 10 | Single | 0.59 | 5.05 | **130704** |

### Medium Globe

| Volts | Watts | Filament | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 6 | 18 | Single | 0.64 | 5.38 | **130801** |
| 12 | 21 | Single | 0.44 | 3.76 | **130802** |
| 12 | 21/5 | Double | 0.59 | 5.05 | **130803** |

### Large Globe

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 6 | 35/35 | Double | | 2.46 | 20.97 | **130904** |
| 6 | 25/25 | Double | (Halogen) | 9.08 | - | **130908** |
| 12 | 36/36 | Double | | 1.86 | 15.81 | **130901** |
| 12 | 36 | Single | | 1.90 | 16.13 | **130902** |
| 12 | 45 | Single | | 2.31 | 19.68 | **130903** |
| 12 | 45/40 | Double | (Halogen) | 9.08 | - | **130906** |

## BAY15d BAYONET

Cap 15mm OD, double contact, offset pins.

### Small Globe

Useful when trying to fit double filament bulbs into confined spaces, eg. existing sidelights.

| Volts | Watts | Filament | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 6 | 21/5 | Double | 1.52 | 12.90 | **131004** |
| 12 | 23/8 | Double | 1.52 | 12.90 | **131003** |

### Medium Globe

| Volts | Watts | Filament | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 6 | 21/5 | Double | 0.59 | 5.05 | **131001** |
| 12 | 21/5 | Double | 0.45 | 3.87 | **131002** |



## LED BULBS

These 12V bulbs fit into standard bayonet fitting bulb holders and are a replacement for normal bulbs. They have the advantage of being extremely long-lasting and require very little current, typically 30mA. Negative earth only. For best results use the same colour LEDs behind the same colour lenses.

### 9 LEDs (all LEDs facing rearwards)

Similar in intensity to 5W bulb. Cap OD 15mm, single contact, parallel pins. 18mm diameter, 32mm long.

| Colour | Fitting | Each | Part No. |
|---|---|---|---|
| Amber | BA15s | 4.25 | **132405** |
| Red | BA15s | 4.25 | **132406** |
| Clear | BA15s | 7.25 | **132407** |

### 19 LEDs (all LEDs facing rearwards)

Similar in intensity to 21W bulb. Cap OD 15mm. 25mm diameter, 46mm long.

| Colour | Fitting | Each | Part No. |
|---|---|---|---|
| Amber | BA15s | 5.25 | **132401** |
| Red | BA15s | 5.25 | **132402** |
| Red | BAY15d (stop/tail) | 5.25 | **132404** |

### 24 LEDs (18 LEDs facing rearwards, 6 radially sideways)

These are similar in intensity to 21W bulbs but also have the advantage of illuminating the inside of the lamp unit or reflector. Cap OD 15mm. 25mm diameter, 38mm long.

| Colour | Fitting | Each | Part No. |
|---|---|---|---|
| Amber | BA15s | 7.25 | **132408** |
| Red | BA15s | 7.25 | **132409** |
| Red | BAY15d (stop/tail) | 7.25 | **132410** |
| Red/White* | BAY15d (stop/tail) | 11.50 | **132411** |

** Has 18 red rearward facing LEDs and 6 white radial sideways LEDs - useful for lamps with apertures or for number plates.*

## BOSCH

### BA20s

Cap OD 20mm, single contact, unequal-sized parallel flat tabs.

| Volts | Watts | Filament | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 6 | 35 | Single | 1.90 | 16.13 | **131101** |
| 12 | 45 | Single | 1.68 | 14.30 | **131102** |

### BA20d

Cap OD 20mm, double contact, unequal-sized parallel flat tabs.

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 6 | 45/40 | Double | | 1.90 | 16.13 | **131201** |
| 6 | 35/35 | Double | (Halogen) | 3.04 | 25.81 | **131204** |
| 12 | 45/40 | Double | | 1.68 | 14.30 | **131202** |
| 12 | 45 | Single | | 1.90 | 16.13 | **131203** |
| 12 | 35/35 | Double | (Halogen) | 3.04 | 25.81 | **131205** |

## MARCHAL

Cap OD 21mm, with three parallel pins equally spaced around the circumference.

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 6 | 40/45 | Double | | 4.05 | 34.41 | ***132103*** |
| 12 | 40/45 | Double | | 4.43 | 37.63 | ***132102*** |
| 12 | 40/45 | Double | (Yellow) | 4.43 | 37.63 | ***132104*** |
| 12 | 45 | Single | | 4.30 | 36.56 | ***132101*** |

## BRITISH PRE-FOCUS

### P36s

Cap OD 36mm, single contact.

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 12 | 48 | Single | | 2.00 | 16.98 | ***131301*** |

### P36d

Standard

Cap OD 36mm, double contact.

| Volts | Watts | Filament | | Each | 10 | Part No. |
|---|---|---|---|---|---|---|
| 6 | 30/24 | Double | | 2.53 | 21.51 | ***131401*** |
| 6 | 35/35 | Double | (Halogen) | 9.08 | - | ***131404*** |
| 12 | 50/40 | Double | | 2.10 | 17.85 | ***131402*** |
| 12 | 38 | Single | | 2.00 | 16.98 | ***131403*** |
| 12 | 60/55 | Double | (Halogen) | 9.08 | - | ***131405*** |

Halogen

## P43t H4

| Volts | Watts | Filament | | Each | Part No. |
|---|---|---|---|---|---|
| 6 | 60/55 | Double | (Halogen) | 5.72 | ***131501*** |
| 12 | 60/55 | Double | (Halogen) | 2.28 | ***131502*** |
| 12 | 100/80 | Double | (Halogen) | 5.45 | ***131503*** |

## P45t

Standard

| Volts | Watts | Filament | | Each | Part No. |
|---|---|---|---|---|---|
| 6 | 45/40 | Double | | 2.28 | ***131601*** |
| 6 | 60/55 | Double | (Halogen) | 7.43 | ***131602*** |
| 12 | 45/40 | Double | | 1.46 | ***131603*** |
| 12 | 60/55 | Double | (Halogen) | 2.95 | ***131604*** |
| 12 | 100/80 | Double | (Halogen) | 6.60 | ***131605*** |

Halogen



## FESTOON BULBS

| Size (mm) | Volts | Watts | Each | 10 | Part No. |
|---|---|---|---|---|---|
| 8 x 31 | 6 | 3 | 0.55 | 4.68 | ***131703*** |
| 8 x 31 | 6 | 5 | 0.55 | 4.68 | ***131704*** |
| 11 x 35 | 6 | 6 | 0.55 | 4.68 | ***131706*** |
| 11 x 38 | 6 | 5 | 0.55 | 4.68 | ***131701*** |
| 11 x 38 | 6 | 10 | 0.55 | 4.68 | ***131707*** |
| 11 x 42 | 6 | 10 | 0.55 | 4.68 | ***131801*** |
| 11 x 42 | 6 | 15 | 0.55 | 4.68 | ***131804*** |
| 15 x 42 | 6 | 15 | 0.55 | 4.68 | ***131901*** |
| 15 x 42 | 6 | 21 | 0.55 | 4.68 | ***131902*** |
| 6 x 36 | 12 | 3 | 0.55 | 4.68 | ***131709*** |
| 8 x 36 | 12 | 3 | 0.55 | 4.68 | ***131708*** |
| 11 x 30 | 12 | 10 | 0.55 | 4.68 | ***131711*** |
| 11 x 35 | 12 | 5 | 0.55 | 4.68 | ***131710*** |
| 11 x 35 | 12 | 10 | 0.55 | 4.68 | ***131712*** |
| 11 x 38 | 12 | 5 | 0.55 | 4.68 | ***131702*** |
| 11 x 42 | 12 | 5 | 0.55 | 4.68 | ***131802*** |
| 11 x 42 | 12 | 10 | 0.55 | 4.68 | ***131803*** |
| 15 x 42 | 12 | 10 | 0.55 | 4.68 | ***131905*** |
| 15 x 42 | 12 | 15 | 0.55 | 4.68 | ***131903*** |
| 15 x 42 | 12 | 21 | 0.55 | 4.68 | ***131904*** |

## CAPLESS BULBS

| Type | Application | Volts | Watts | Each | Part No. |
|---|---|---|---|---|---|
| W2 x 4.6d (T5) | Panel light | 12 | 1.2 | 0.43 | ***132201*** |
| W2.1 x 9.5d (T10) | Sidelight | 12 | 5 | 0.43 | ***132202*** |
| W3 x 16d (T20) | Indicator | 12 | 21 | 0.94 | ***132203*** |

## BULB HOLDERS

### BAY15d

Offset pins, double contacts, 2 screw connections. For use with bulbs having cap OD of 15mm.

| Each | Part No. |
|---|---|
| 2.28 | ***132001*** |

### BA15d

*Type*

Parallel pins, double contacts, 2 screw connections. For use with bulbs having cap OD of 15mm.

| Each | Part No. |
|---|---|
| 2.28 | ***132002*** |

*contd...*

## BULB HOLDERS *(contd)*

### BA15s

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Parallel pins, single contact, single screw connection. For use with bulbs having cap OD of 15mm. | 1.14 | ***132003*** |

| | | |
|---|---|---|
| Parallel pins, single contact, 2 screw connections (1 ground). For use with bulbs having cap OD of 15mm. | 2.42 | ***132004*** |

### BA9s

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Single contact, single screw connection. Earths through metal case. For use with bulbs having cap OD of 9mm. | 0.95 | ***132005*** |

| | | |
|---|---|---|
| Insulated bulb holder. 2 x 6.3mm blade connections. 11.9mm OD. For use with bulbs having cap OD of 9mm. | 1.05 | ***132019*** |

### BA7s

| | | |
|---|---|---|
| Single contact, single screw connection. Earths through metal case. For use with bulbs having cap OD of 7mm. | 0.95 | ***132006*** |

### MES

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Non-insulated bulb holder, with claws to fit 5/8” dia. panel hole. Supplied with rivet to be crimped or soldered to wire. Bulb is earthed through casing. | 1.85 | ***132008*** |

| | | |
|---|---|---|
| Insulated bulb holder, with insulated claws to fit 5/8” dia. panel hole. Supplied with rivet to be crimped or soldered to wire. Suitable for charge warning lamps, etc. | 1.54 | ***132009*** |
| Spare rivets for above. | 0.02 | ***132017*** |

### Capless

| | | |
|---|---|---|
| Insulated T10 (W2.1 x 9.5d) bulb holder. 2 x 6.3mm blade connections. 12.0mm OD. | 0.66 | ***132018*** |

### Festoon

| | | |
|---|---|---|
| Bulb holder suitable for taking 35mm long festoon bulbs. Single screw mounting hole. | 4.68 | ***132021*** |



## REPAIR BULB HOLDERS

Useful for repairing reflectors with damaged/missing bulb holders. Will fit into 22mm diameter hole. Bulb holder edge is then peened over to attach.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Single contact, parallel pins (BA15s) | 4.95 | ***132014*** |
| Double contact, offset pins (BAY15d) | 4.95 | ***132015*** |

## REPLACEMENT LUCAS BULB HOLDERS

These bulb holders are for use with the following range of Lucas lights.

### Lucas L594

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Single contact, parallel pins (BA15s) | 4.62 | ***132010*** |
| Double contact, offset pins (BAY15d) | 4.62 | ***132011*** |

### Lucas L488

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Single contact, parallel pins (BA15s) | 4.95 | ***132012*** |
| Double contact, offset pins (BAY15d) | 4.95 | ***132013*** |

### Lucas L1130

| | | |
|---|---|---|
| Double contact, offset pins (BAY15d) | 10.25 | ***132020*** |

# LIGHTING

## HEADLAMPS & ACCESSORIES

### Mounting Bowls and Ring

| | *Each* | *Part No.* |
|---|---|---|
| Headlamp bowl to take 7” sealed beam or 7” metal reflectors. Made from tough black plastic. Comes complete with chrome-plated lens retaining bezel, bodywork sealing gasket, cable grommet and retaining screws. | 13.44 | ***170101*** |
| As above but for 5.75” light units. | 15.99 | ***170106*** |

| | | |
|---|---|---|
| Headlamp mounting ring. As above but without the bowl. Useful for mounting headlamps in confined spaces. Takes 7” sealed beam or 7” metal reflectors. | 15.02 | ***170102*** |

*contd...*

## HEADLAMPS & ACCESSORIES *(contd)*

### Sealed Beam Units

| | Each | Part No. |
|---|---|---|
| 7" sealed beam unit. 12V, 60/45W. Has side-light glass window. | 7.92 | ***170103*** |
| 5.75" sealed beam unit. Single filament. 12V, 50W. | 8.71 | ***170107*** |

*European (ie. right-hand dip) versions of the above lamps are also available - please phone for details.*

### Halogen Conversions

Consist of metal reflectors that take P43t H4 tungsten halogen bulbs. These units are physically interchangeable with sealed or semi-sealed beam lamps and the bulbs have the same electrical connection. Available with or without side light aperture. Bulbs need to be ordered separately (see page xx).

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 7" without sidelight | 16.50 | ***170112*** |
| 7" with sidelight | 16.50 | ***170113*** |
| 5.75" without sidelight | 13.50 | ***170109*** |
| 5.75" with sidelight | 13.50 | ***170110*** |

*European (ie. right-hand dip) versions of the above lamps are also available - please phone for details.*

### Headlamp Harnesses

| | Each | Part No. |
|---|---|---|
| Headlamp harness suitable for all headlight types without integral sidelights. Comes with headlamp connecting plug, 80cm of cables, sleeving, headlamp shell grommet and bullet connectors. Suitable for use with 170107, 170112 & 170109. | 7.00 | ***170201*** |

| | | |
|---|---|---|
| Headlamp harness suitable for sealed beam units with sidelight windows. Comes with headlamp connecting plug with sidelight bulb holder, 1m of cables, sleeving, headlamp shell grommet and bullet connectors. Requires T10 bulb (132202). Suitable for use with 170103. | 7.90 | ***170202*** |

| | | |
|---|---|---|
| Headlamp harness suitable for metal reflectors, with hole for clip-in sidelight bulb holder. Comes complete with headlamp connecting plug, rubber dust cover, separate sidelight bulb holder, 1m of cables, sleeving, headlamp shell grommet and bullet connectors. Requires T10 bulb (132202). Suitable for use with 170113 & 170110. | 9.03 | ***170203*** |

### Headlamp Rims

Chrome-plated rims to fit 7" headlamp bowls (170101) and headlamp mounting rings (170102). Held in place with a retaining screw. Available in two diameters.

| *Outside diameter* | *Each* | *Part No.* |
|---|---|---|
| 8.5" | 16.09 | ***170301*** |
| 8" | 14.92 | ***170302*** |

| | | |
|---|---|---|
| Black plastic rim to fit 5.75" headlamp bowl. | 6.64 | ***170303*** |

### Classic-Style Headlamps

Classic free-standing headlamps with 60/55W halogen bulbs. Come complete with integral sidelight and lead. Available in either polished stainless steel or black finish and with either 7" or 5.75" diameter reflectors.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 7" polished stainless steel | 79.00 | ***170401*** |
| 7" black | 79.00 | ***170402*** |
| 5.75" polished stainless steel | 73.00 | ***170403*** |
| 5.75" black | 73.00 | ***170404*** |

### Off-Road Driving Lamps

Wipac 4x4 driving lamp. High power 12V, 100W, 8" diameter halogen lamps. Available with either black or stainless steel body, both with stainless steel rim. Supplied with armoured cable and fitted plastic stone guard. Sold as pair only.

| *Type* | *Pair* | *Part No.* |
|---|---|---|
| Black body | 54.99 | ***170411*** |
| Stainless steel body | 76.99 | ***170412*** |

### Headlamp Shells

Lucas S700 free-standing 7" headlamp shell with rim. Comes complete with 600mm lead with bullet terminals on one end and headlamp plug inside lamp. Black with chrome rim. Will take sealed beam units or halogen conversions. Requires at least three W-clips to hold in light unit.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Headlamp shell | 59.00 | ***170405*** |

| | | |
|---|---|---|
| W Clip | 0.66 | ***170410*** |

## REAR LAMPS

| | Type | Each | Part No. |
|---|---|---|---|
| | Tail lamp. Rubber-mounted black plastic base with red lens. Two holes for fixing screws. 62 x 62 x 46mm. E-marked. Requires 5W festoon bulb (131702 - see page 61). | 4.26 | ***170506*** |
| | Tail lamp. Steel base plate with lens secured by chrome ring. Two holes for fixing screws. 70mm diameter x 36mm deep. E-marked. Requires 5W festoon bulb (131702 - see page 61). | 5.45 | ***170507*** |
| | Tail lamp. Steel base plate with red plastic lens and illuminating window for number plate. Supplied with fixing bolts and grommet. 75mm diameter x 40mm deep. E-marked. Requires 5W festoon bulb (131802 - see page 61). | 6.57 | ***170508*** |
| | Lucas L594 stop/tail lamp. 72mm diameter rubber base with 54mm diameter domed glass lens. Supplied with 12V, 21/5W bulb. Overall length approx. 100mm including lens. Spare parts are available separately (see page 74). | 14.50 | ***170509*** |
| | Pattern version of Lucas L594 with plastic lens. Supplied with bulb and 20cm of cable with bullet terminals. | 7.91 | ***170603*** |
| | Lucas L488 stop/tail lamp. 72mm diameter rubber base with 54mm diameter flat glass lens. Supplied with 12V, 21/5W bulb. Overall length approx. 100mm including lens. Spare parts are available separately (see page 74). | 15.50 | ***170510*** |
| | Lucas L691 stop/tail lamp. 83mm diameter chromed metal base with 80mm diameter domed plastic lens. Supplied with 12V, 21/5W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 90mm including lens. E-marked. | 16.75 | ***170511*** |



| | Type | Each | Part No. |
|---|---|---|---|
| | Lucas L539 stop/tail lamp. 83mm diameter chromed metal base with 65mm diameter domed plastic lens. Supplied with 12V, 21/5W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 75mm including lens. | 24.95 | ***170512*** |
| | Rubber bodied tail lamp. 56mm diameter with a slightly curved plastic lens. Requires 30mm diameter panel hole. Overall length 78mm. Requires 12V, 5W BA15s bulb (130403 - see page 57). | 10.54 | ***170514*** |
| | Rubber bodied marker lamp that can be used as a discrete tail lamp. Body diameter 56mm, lens diameter 35mm. Overall length 91mm. Supplied with mounting bracket. E-marked. Requires 12V, 5W BA15s bulb (130403 - see page 57). | 11.97 | ***170515*** |
| | Surface mounted modern style stop/tail lamp. 94 mm diameter. Connection via 3 pin econoseal socket (051204 - see page 16) which needs to be purchased separately. Supplied with 12V, 21/5W bulb and sealing gasket. Can be bezel mounted. E-marked. | 14.66 | ***170516*** |
| | As above but tail lamp only. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 5W bulb and sealing gasket. Can be bezel mounted. | 15.77 | ***170517*** |
| | Mounting bezel for above lamps (170516 & 170517). | 1.85 | ***170416*** |
| | Lucas L549 stop/tail lamp. Supplied with 12V, 21/5W bulb and sealing gasket. | 23.00 | ***170518*** |
| | Stop/tail lamp with number plate illumination lens and reflector. 78mm diameter. Requires 35mm panel hole. Supplied with 12V, 21/5W bulb. E-marked. | 15.52 | ***170519*** |

*contd...*

## REAR LAMPS *(contd)*

Reproduction Lucas ST51 split window 'D' light. Has two BA15s bulb holders and is supplied with 12V bulbs; one 5W for tail light, one 21W for brake light. Has side window for number plate lamp illumination.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Chrome | 40.00 | ***170501-S*** |
| Black | 40.00 | ***170502-S*** |

Reproduction Lucas ST38 'Pork Pie' light. Three bulb holders, two for tail lights and one for stop. Has side light window for number plate illumination. 90mm dia. x 60mm deep. Comes with 12V bulbs. Available in black or chrome.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Chrome | 40.00 | ***170503-C*** |
| Black | 40.00 | ***170503*** |

The above lamp is also available with a different lens, one half being amber, so the unit can be a combined stop/tail and indicator light. It has three bulbs, one 5W side light, one 21W indicator and one 21W brake light. The light is internally wired and is supplied with leads ready for connection.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Chrome | 55.00 | ***170503-CI*** |
| Black | 55.00 | ***170503-BI*** |

| *Each* | *Part No.* |
|---|---|
| 29.64 | ***170505*** |

Combined tail light and indicator light. 77mm diameter by 60mm deep. Black metal case. Comes complete with cable grommet and mounting bolts. Requires 43mm festoon bulbs (131802 & 131904 - see page 61).

## SIDE LAMPS

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Lucas L594 side lamp. 72mm diameter rubber base with 54mm diameter domed glass lens. Supplied with 12V, 5W bulb. Overall length approx. 100mm including lens. Spare parts are available separately (see page 74). | 14.50 | ***170609*** |
| Double-pole version of above lamp. Will take 21/5W bulb, which turns lamp into indicator/ side light. | 14.50 | ***170622*** |

| | | |
|---|---|---|
| Pattern version of Lucas L594 with plastic lens. Supplied with bulb and 20cm of cable with bullet terminals. | 7.91 | ***170601*** |

| | | |
|---|---|---|
| Flush-fit version of above (170601) with single filament 5W festoon bulb. | 4.46 | ***170604*** |

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Lucas L488 side lamp. 72mm diameter rubber base with 54mm diameter flat glass lens. Supplied with 12V, 5W bulb. Overall length approx. 100mm including lens. Spare parts are available separately (see page 74). | 15.50 | ***170610*** |
| Double-pole version of above lamp. Will take 21/5W bulb, which turns lamp into indicator/ side light. | 15.50 | ***170621*** |

| | | |
|---|---|---|
| Lucas L691 side lamp. 83mm diameter chromed metal base with 80mm diameter domed plastic lens. Supplied with 12V, 5W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 90mm including lens. E-marked. | 16.75 | ***170611*** |

| | | |
|---|---|---|
| Lucas L539 side lamp. 83mm diameter chromed metal base with 65mm diameter domed plastic lens. Supplied with 12V, 5W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 75mm including lens. | 24.95 | ***170612*** |

| | | |
|---|---|---|
| Rubber bodied side lamp. 56mm diameter with a slightly curved plastic lens. Requires 30mm diameter panel hole. Overall length 78mm. E-marked. Requires 12V, 5W BA15s bulb (130403 - see page 57). | 10.54 | ***170613*** |

| | | |
|---|---|---|
| Rubber bodied marker lamp that can be used as a discrete side lamp. Body diameter 46mm, lens diameter 35mm. Overall length 91mm. Supplied with mounting bracket. E-marked. Requires 12V, 5W BA15s bulb (130403). | 11.97 | ***170615*** |

| | | |
|---|---|---|
| Surface mounted modern style side lamp. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 5W bulb and sealing gasket. Can be bezel mounted. E-marked. | 14.66 | ***170616*** |

| | | |
|---|---|---|
| Mounting bezel for above lamp (170616). | 1.85 | ***170416*** |

| | | |
|---|---|---|
| Lucas 1130 side/indicator lamp with double pole bulb holder, metal rim and glass effect lens. Supplied with 12V, 21/5W bulb. Spare bulb holders are available separately (see page 63). | 42.50 | ***170619*** |

## INDICATOR LAMPS

| | Type | Each | Part No. |
|---|---|---|---|
| | Lucas L594 indicator lamp. 72mm diameter rubber base with 54mm diameter domed amber glass lens. Supplied with 12V, 21W bulb. Overall length approx. 100mm including lens. E-marked. Spare parts are available separately (see page 74). | 14.50 | ***171009*** |
| | Pattern version of Lucas L594 with amber plastic lens. Supplied with bulb and 20cm of cable with bullet terminals. | 7.91 | ***170602*** |
| | Flush-fit version of above (170602). Requires 21W festoon bulb, part no. 131904 (12V) or 131902 (6V) - see page 61. | 4.46 | ***170605*** |
| | Lucas L488 indicator lamp. 72mm diameter rubber base with 54mm diameter flat amber glass lens. Supplied with 12V, 21W bulb. Overall length approx. 100mm including lens. Spare parts are available separately (see page 74). | 15.50 | ***171010*** |
| | Lucas L691 indicator lamp. 83mm diameter chromed metal base with 80mm diameter domed amber plastic lens. Supplied with 12V, 21W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 90mm including lens. E-marked. | 16.75 | ***171011*** |
| | Lucas L539 indicator lamp. 83mm diameter chromed metal base with 65mm diameter domed amber plastic lens. Supplied with 12V, 21W bulb, 600mm leads with bullet terminals and sealing gasket. Overall length approx. 75mm including lens. | 24.95 | ***171012*** |
| | Rubber bodied marker lamp that can be used as a discrete indicator lamp. Body diameter 46mm, lens diameter 35mm. Overall length 91mm. Supplied with mounting bracket. Requires BA15s bulb. Recommended for use with 19 LED bulb, part no. 132401. *Please note: This lamp unit was designed for use with standard 5W bulbs. If used with standard 21W bulbs in a* ***non-flashing*** *mode, damage to the light unit will occur due to the heat generated.* | 11.97 | ***170607*** |



| | Type | Each | Part No. |
|---|---|---|---|
| | Surface mounted modern style indicator lamp. 94mm diameter. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 21W bulb and sealing gasket. Can be bezel mounted. E-marked. | 14.66 | ***171016*** |
| | As above but rear indicator lamp. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 21W bulb and sealing gasket. Can be bezel mounted. E-marked. | 14.66 | ***171017*** |
| | Mounting bezel for above lamps (171016 & 171017). | 1.85 | ***170416*** |

## INDICATOR REPEATER LAMPS

| | Type | Each | Part No. |
|---|---|---|---|
| | 41mm diameter round repeater lamp. 2 x fixing studs. 6.3mm blade terminal. Supplied with rubber gasket and terminal cover. E-marked. Requires BA9s bulb. | 3.95 | ***171020*** |
| | 76 x 24mm rectangular repeater lamp. 2 x fixing studs. 6.3mm blade terminal. Supplied with rubber gasket and terminal cover. E-marked. Requires BA9s bulb. | 3.85 | ***171021*** |
| | 30mm square repeater lamp. Has integral mounting clips. Supplied with rubber gasket and terminal cover. E-marked. Requires BA9s bulb. | 4.12 | ***171022*** |

**INDICATOR KITS**
See page 86.

**HAZARD KITS**
See page 86.

## REAR FOG LAMPS

| Type | Each | Part No. |
|---|---|---|
| Rear fog lamp that can either be surface mounted or attached with the bracket provided. 130 x 76 x 55mm. E-marked. Requires 12V, 21W bulb (130502). | 4.97 | ***172001*** |

Rear fog lamp mounted on an adjustable steel bracket. Black plastic body 125 x 80 x 75mm. E-marked. Requires 12V, 21W bulb (130502). — 10.87 ***172002***

Circular black metal cased rear fog lamp mounted on an adjustable bracket. 122mm diameter. E-marked. Requires 12V, 21W bulb (130502). — 16.75 ***172003***

Surface mounted modern style rear fog lamp. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 21W bulb and sealing gasket. Can be bezel mounted. E-marked. — 14.66 ***172016***

Mounting bezel for above lamp (172016). — 1.85 ***170416***

## REVERSING LAMPS

| Type | Each | Part No. |
|---|---|---|
| Surface mounted modern style reversing lamp. 94mm diameter. Connection via 2 pin econoseal socket (051202 - see page 16) which needs to be purchased separately. Supplied with 12V, 21W bulb and sealing gasket. Can be bezel mounted. E-marked. | 14.66 | ***173016*** |

Mounting bezel for above lamp (173016). — 1.85 ***170416***

Circular black metal cased reversing lamp mounted on an adjustable bracket. 122mm diameter. E-marked. Requires 12V, 21W bulb (130502). — 16.75 ***173003***

Reversing lamp mounted on an adjustable steel bracket. Black plastic body 125 x 80 x 75mm. E-marked. Requires 12V, 21W bulb (130502). — 10.87 ***173002***

| Type | Each | Part No. |
|---|---|---|
| Reversing lamp that can either be surface mounted or attached with the bracket provided. 130 x 76 x 55mm. E-marked. Requires 12V, 21W bulb (130502). | 4.97 | ***173001*** |

## NUMBER PLATE LAMPS

| Type | Each | Part No. |
|---|---|---|
| Black plastic number plate lamp. 102 x 55 x 57mm. Requires 12V, 5W bulb (130403). | 4.48 | ***170703*** |

Black plastic number plate lamp. 83 x 30 x 35mm. Requires 12V, 5W festoon bulb (131702). — 4.18 ***170704***

Metal based number plate lamp with 2 x BA9s bulbs, supplied. Available with either black plastic cover or chrome-plated cover. Both have plastic lens and rubber sealing gasket. 110 x 45 x 40mm.

| Type | Each | Part No. |
|---|---|---|
| Black plastic | 8.01 | ***170701*** |
| Chromed steel | 16.00 | ***170702*** |

## MULTI-FUNCTION AND TRAILER LAMPS

Stop/tail and indicator lamp. Plastic base and plastic lens. 104 x 98 x 50mm. Supplied with fixing bolts and grommet. E-marked. Requires bulbs (130502 & 131002).

| Type | Each | Part No. |
|---|---|---|
| With number plate illumination | 4.29 | ***174001*** |
| Without number plate illumination | 4.18 | ***174002*** |

Stop/tail and indicator lamp. Illumination window for number plate (can be blanked off using supplied plate). 158 x 64 x 51mm. Supplied with grommet. Requires bulbs (2 x 130502 & 1 x 130404).

| Type | Each | Part No. |
|---|---|---|
| Left hand | 7.70 | ***174003*** |
| Right hand | 7.70 | ***174004*** |
| Pair | 14.30 | ***174005*** |

Trailer lighting set. Pair of magnetic multi-function lamps with attached triangular reflectors. Prewired with 7.5m of cable to a standard trailer plug. Supplied with bulbs. Very useful and adaptable set. Plug-in and go. — 30.80 ***174006***

## INTERIOR LAMPS

| Type | Each | Part No. |
|---|---|---|
| Recess mounted interior lamp. Plastic construction with integral three position switch. Supplied with 12V, 10W festoon bulb. 143 x 67 x 77mm. | 15.50 | ***176001*** |

| | | |
|---|---|---|
| Surface mounted 90mm diameter interior roof lamp. Plastic construction with integral switch. Supplied with 12V, 10W festoon bulb. | 10.19 | ***176007*** |

| | | |
|---|---|---|
| Enamelled metal body with plastic lens and integral switch. 353 x 58 x 29 mm. Supplied with 12V, 8W fluorescent tube. | 21.38 | ***176004*** |
| Spare 12V, 8W fluorescent tube for above lamp (176004). | 4.96 | ***176005*** |

## SPARE PARTS FOR LUCAS LAMPS

### L594

| Item | Each | Part No. |
|---|---|---|
| Amber lens | 5.90 | ***177001*** |
| Clear lens | 5.90 | ***177002*** |
| Red lens | 5.90 | ***177003*** |
| Rubber body | 3.00 | ***178002*** |
| Chromed rim | 1.95 | ***178003*** |
| Bulb holder (single contact, BA15s) | 4.20 | ***132010*** |
| Bulb holder (double contact, BAY15d) | 4.20 | ***132011*** |

### L488

| Item | Each | Part No. |
|---|---|---|
| Amber lens | 5.90 | ***177004*** |
| Clear lens | 5.90 | ***177005*** |
| Red lens | 5.90 | ***177006*** |
| Rubber body | 3.00 | ***178001*** |
| Chromed rim | 1.95 | ***178003*** |
| Bulb holder (single contact, BA15s) | 4.50 | ***132012*** |
| Bulb holder (double contact, BAY15d) | 4.50 | ***132013*** |

### L691

Lenses come with mounting screws and gaskets.

| Item | Each | Part No. |
|---|---|---|
| Amber lens | 7.35 | ***177007*** |
| Clear lens | 7.35 | ***177008*** |
| Red lens | 7.35 | ***177009*** |



## REFLECTORS

| Type | Each | Part No. |
|---|---|---|
| Red triangular with two fixing holes. E-marked. | 1.16 | ***175001*** |

| | | |
|---|---|---|
| Red 60mm diameter with fixing hole. E-marked. | 0.60 | ***175002*** |

| | | |
|---|---|---|
| Red 83mm diameter with fixing hole. E-marked. | 0.91 | ***175003*** |

| | | |
|---|---|---|
| Red 90 x 40mm with two fixing holes. E-marked. | 1.09 | ***175004*** |

| | | |
|---|---|---|
| Lucas red reflector having diameter of 55mm. Overall unit diameter 70mm. Fixes to vehicle with self-tapping screw. E-marked. | 8.75 | ***175005*** |

| | | |
|---|---|---|
| Red reflector with chrome-plated metal surround. Reflective area 70 x 34mm. 5mm fixing holes on 80mm centres. Overall size 88 x 40mm. E-marked. | 7.50 | ***175006*** |

# FLASHER UNITS & RELAYS

## FLASHER UNITS

### 6 Volt

| Type | Each | Part No. |
|---|---|---|
| Electronic 6V relay. 2 x 21W capacity. 3 x 6.3mm blade terminals. Supplied with mounting bracket. Connection details - see page 93. | 5.72 | ***140108*** |

| | | |
|---|---|---|
| Good quality 6V indicator relay, made by Bosch. 3 x 6.3mm blade contacts. Comes with mounting bracket and wiring diagram. Can power 2 x 18/21W indicators plus separate dash warning lamp. Negative or positive earth applications. Connection details - see page 92. | 20.63 | ***140106*** |

*contd...*

## FLASHER UNITS *(contd)*

### 12 Volt

| Type | Each | Part No. |
|---|---|---|
| Electronic hazard/flasher unit. 2/4 x 21W + 5W capacity. 3 x 6.3mm blade terminals. Supplied with wiring diagram (also shown on page 91). Can be used on both positive and negative earth vehicles. Connection details - see page 92. | 6.75 | ***140102*** |

| | | |
|---|---|---|
| Electronic hazard/flasher unit. 2/4 x 21W + 5W capacity. 4 x 6.3mm blade terminals. Requires earth. Supplied with wiring diagram. Negative earth only. Connection details - see page 92. | 9.48 | ***140103*** |

| | | |
|---|---|---|
| Lucas SFB105 flasher unit. 46W capacity, 12V. Aluminium can with integral mounting bracket. 3 x 6.3mm blade terminals, marked B (power in), P (warning lamp), and L (flasher signal out). Positive or negative earth applications. Connections details - see page 93. | 5.78 | ***140110*** |

| | | |
|---|---|---|
| Electronic flasher unit that can operate LED indicator lights and conventional bulbs or a mixture of both. Useful when used with LED replacement bulbs. 3 x 6.3mm blade terminals. Negative earth only. Capacity up to 30W. Connection details - see page 92. | 9.80 | ***140107*** |

| | | |
|---|---|---|
| Lucas DB10 style flasher unit. To enable brake lights to also be used as rear indicators. 12V only. 8 x screw terminals. Supplied with wiring diagram. Connection details - see page 92. | 60.00 | ***140105*** |

## BUZZERS AND ALARMS

| Type | Each | Part No. |
|---|---|---|
| Dashboard buzzer. 12V, 2 tone, 72dB(A). More of a warble than a buzz. Single hole fixing. 2 x 6.3mm blade terminals. | 8.36 | ***140401*** |

| | | |
|---|---|---|
| Lights on warning buzzer. For use behind the dash board to warn of lights having been left on. 3 x 6.3mm blade terminals. 2 tone, 72dB(A). Supplied with wiring diagram. | 8.14 | ***140402*** |

| Type | Each | Part No. |
|---|---|---|
| Dashboard buzzer. 12V loud and urgent tone. Suitable for use as an indicator warning buzzer, etc. 2 x 6.3mm blade terminals. Polarity sensitive. | 6.00 | ***140403*** |

| | | |
|---|---|---|
| Back-up alarm with 105 dB(A) intermittent sound. 12V. Made from black plastic with metal fixing bracket. 55mm diameter. CE approved. | 11.88 | ***140404*** |

## RELAYS

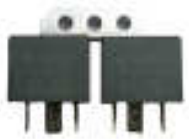
### 6 Volt Relays (all with mounting lugs)

| Type | Each | Part No. |
|---|---|---|
| Make and break. 30A @ 6V. 4 x 6.3mm blade terminals. | 5.72 | ***140217*** |

| | | |
|---|---|---|
| Change over. 20/30A @ 6V. 5 x 6.3mm blade terminals. Connections as per 140206 (12V change over relay). | 11.13 | ***140210*** |

### 12 Volt Relays (all with mounting lugs except 140209)

| | | |
|---|---|---|
| Make and break. 40A. 4 x 6.3mm blade terminals. | 2.20 | ***140201*** |
| Fused make and break. 15A. 4 terminals (6.3mm blade). *NB: This unit will not fit into relay box (140304).* | 5.28 | ***140202*** |
| Heavy duty make and break. 70A. 4 terminals (2 x 6.3mm and 2 x 9.5mm blades). | 6.49 | ***140203*** |
| Double make and break. 2 x 15A. 5 terminals (6.3mm blade). | 4.62 | ***140204*** |
| Twin make and break. 30A. 5 terminals (6.3mm blade). | 4.18 | ***140205*** |
| Change over. 20/30A. 5 terminals (6.3mm blade). | 4.29 | ***140206*** |



| | | |
|---|---|---|
| Twin make and break. Two 12V make and break relays mounted on one common bracket. | 7.04 | ***140212*** |

*contd...*

## RELAYS *(contd)*

### 12 Volt *(contd)*

*Type*
Change over latching relay that can be remotely controlled by a momentarily on switch. For example, use this as a dip switch with a push button switch to change between main beam and dip and vice versa. 12V, 25A with resistor. Relay remains latched when power is lost.

*Each* 14.50 *Part No.* ***140209***

Extra heavy duty relay 100A @ 12V. Has 2 x M6 stud connectors (for circuit to be switched) and 2 x 6.3mm male blade connectors (trigger connections). Approx. 45mm x 45mm x 45mm, with integral bracket.
*NB: This unit will not fit into a relay socket.*

11.88 ***140211***

Interior light delay relay. Gives 10 seconds delay to interior lights going off. 4 x 6.3mm blade connections. (Supplied with wiring diagram). Connection details - see page 93.

9.06 ***140207***

12V timer relay which switches off after 10 minutes. Useful for functions such as heated screens. 5 x 6.3mm blade connections. For wiring connections - see page 93.

9.88 ***140270***

Lucas SRB111 (6RA) make and break relay. 20A switching capacity. Normally open. (Supplied with wiring diagram). Connection details - see page 93.

22.50 ***140208***

Lucas SRB146 (6RA) change over relay (picture as above). 20A switching capacity. Connection details - see page 93.

27.17 ***140214***

Lucas SRB143 (6RA) change over relay. 5 x 6.3mm blade connections. 20A capacity. Connection details - see page 93.

28.60 ***140213***

Lucas 33RA make and break relays. 4 terminals. 85 and 86 are coil connections (6.3mm blade), 30 and G switch connections (5mm screw). Available in 12V or 24V, continuous operation or intermittent. Supplied with mounting bracket.

| *Type* | *Voltage* | *Operation* | *Capacity* | *Colour* | *Each* | *Part No.* |
|---|---|---|---|---|---|---|
| SRB600 | 12V | Continuous | 60A | Black | 13.72 | ***140232*** |
| SRB601 | 24V | Continuous | 40A | Red | 13.72 | ***140231*** |
| SRB631 | 12V | Intermittent | 60A | Green | 14.49 | ***140233*** |
| SRB632 | 24V | Intermittent | 40A | Blue | 17.76 | ***140234*** |

### Micro Relays

These are smaller than standard relays and have no mounting lugs or brackets. Approx. 22 x 13 x 25mm (tall) excluding pins. 12V.

*Type*
Make and break, 4 terminals (2 x 6.3mm and 2 x 4.8mm blades). 25A.

*Each* 3.25 *Part No.* ***140261***

Change over relay. 5 terminals (2 x 6.3mm and 3 x 4.8mm blades). 10/20A.

3.85 ***140260***

## RELAY SOCKETS & BOXES

Fixed sockets which accept a maximum of 9 terminals. Can be clipped together to form a block. Supplied with all terminals.

*Type*
5 x 6.3mm blade and 4 x 2.8mm blade.

*Each* 1.32 *Part No.* ***140301***

2 x 9.5mm blade, 3 x 6.3mm blade and 4 x 2.8mm blade.

2.20 ***140302***

Flying socket which accepts 5 x 6.3mm blade terminals. Supplied with all terminals.

1.32 ***140303***

Relay box which accepts 4 x standard relays. Comes complete with transparent lid, gasket, terminals and terminal locking bar. Terminals are crimped onto wires and then inserted into the base of the relay box. Can be clipped together and to the 16-way fuse box (100110) to form an integrated unit. Relay box size H64 x W123 x D42mm.

16.00 ***140304***

Relay socket to take standard relays (having 6.3mm blade terminals) and three blade fuses. Can be clipped together to form a block. Supplied with all terminals.

2.42 ***140305***

# VOLTAGE REGULATORS & DYNAMO BRUSHES

## VOLTAGE REGULATORS

### 6 Volt

*Type*
6V. Bosch 0.190.213.032 replacement regulator. Works by regulating to earth. Not suitable for Lucas dynamos.

*Each* 38.00 *Part No.* ***160402***

*contd...*

## VOLTAGE REGULATORS *(contd)*

### 12 Volt

| Type | Each | Part No. |
|---|---|---|
| 12V, 22A. Replaces Lucas RB106, NCB101, etc. Screw terminals. | 21.00 | ***160201*** |
| 12V, 22A. Replaces Lucas RB106, NCB101, etc. Blade terminals. | 21.00 | ***160202*** |

| | | |
|---|---|---|
| 12V. Replaces NCB144 - 4TR. 3 x 6.3mm blade terminals. | 25.30 | ***160209*** |
| 12V. Replaces NCB148 - 4TR. 4 x 6.3mm blade terminals. | 25.30 | ***160210*** |

| | | |
|---|---|---|
| 12V, 25A. Replaces Lucas RB340, NCB131, NCB133, etc. | 19.25 | ***160203*** |
| 12V, 22A. Replaces Lucas RB340, NCB130, etc. | 19.25 | ***160204*** |
| 12V, 11A. Replaces Lucas RB340, NCB134, NCB136, etc. | 19.36 | ***160205*** |

| | | |
|---|---|---|
| 12V, 11A. Replaces Lucas RB108, NCB119, etc. | 19.80 | ***160206*** |

| | | |
|---|---|---|
| 12V, 11A. Replaces Lucas RB108, NCB118, etc. | 19.80 | ***160207*** |

| | | |
|---|---|---|
| 12V. Bosch 0190.350.023 replacement dynamo regulator. Also replacement for Bosch 0190.350.026, 038, 039, 054, 055, 061, 062, 068, 069, 079 & 084. | 25.85 | ***160401*** |

## DYNAMO BRUSHES

| Type | Pair | Part No. |
|---|---|---|
| Brushes for Lucas C40 dynamos. Size: 5.5 x 19.05 x 18.2mm. | 1.45 | ***180101*** |
| Brushes for Lucas C39 dynamos. Size: 6.35 x 19.05 x 15.9mm. | 1.69 | ***180102*** |



# TOWING EQUIPMENT

## PLUGS & SOCKETS

12N plugs and sockets are the normal type for trailer lights, etc. 12S plugs and sockets are for supplementary applications such as caravan power, etc.

| Type | Each | Part No. |
|---|---|---|
| 7 pin metal plug (12N) | 2.78 | ***230101*** |
| 7 pin metal socket (12N) | 3.27 | ***230103*** |
| 7 pin plastic plug (12N) | 2.06 | ***230102*** |
| 7 pin plastic socket (12N) | 2.30 | ***230104*** |
| 7 pin plastic plug (12S) | 2.06 | ***230105*** |
| 7 pin plastic socket (12S) | 2.66 | ***230106*** |

## PRE-WIRED SOCKETS

| Type | Each | Part No. |
|---|---|---|
| 7 pin plastic socket (12N) on mounting plate with 1.5 metres of cable. | 7.44 | ***230201*** |
| 7 pin plastic socket (12S) on mounting plate with 1.5 metres of cable. | 7.96 | ***230202*** |
| 7 pin plastic socket (12N) and 7 pin plastic socket (12S) mounted on double plate with cable. | 14.04 | ***230203*** |

## SOCKET GASKETS

| Type | Each | Part No. |
|---|---|---|
| Rubber gaskets for 7 pin sockets. | 0.85 | ***230303*** |

## SOCKET MOUNTING PLATES

| Type | Each | Part No. |
|---|---|---|
| Single socket side mounting plate. | 1.39 | ***230301*** |

| | | |
|---|---|---|
| Double socket side mounting plate. | 2.40 | ***230302*** |

*contd...*

## TOWING RELAYS

| Type | Each | Part No. |
|---|---|---|
| Adjustable audible relay. This unit is designed to make an audible bleep when the vehicle indicators are turned on (only when coupled to a trailer or caravan). The vehicle must have a heavy duty flasher unit. Supplied with wiring diagram. Connection details - see page 95. | 7.92 | ***230401*** |

| | | |
|---|---|---|
| Lucas SRB630 60A split charge relay. Enables connection of second battery and/or fridge. Can be triggered from ignition supply or alternator warning light terminal. Connection details - see page 95. | 18.31 | ***140235*** |

## TRAILER LIGHTS

See "Multi-Function/Trailer Lamps", page 73.

# ACCESSORIES

## 12V FUEL SOLENOID VALVES

Anti-theft 12V solenoid valves for petrol and diesel. Cuts off fuel when not energised. Pressure 0-3 bar. Two sizes available.

| Bore Size | Pipe Spigot Dia. | Each | Part No. |
|---|---|---|---|
| 3.5mm | 8mm | 39.06 | ***250101*** |
| 6.0mm | 11mm | 42.13 | ***250102*** |

## WIPER MOTORS

Universal wiper motor with an on/off switch on rear of aluminium casing. The mounting shaft has an M10 thread along its length and allows the wiper to be fitted to frames up to 84mm thick. The mounting shaft and the co-axial driving shaft can be cut down to suit any frame up to this thickness. Available with either an 85º or 110º travelling arc. 12V.

| Arc | Each | Part No. |
|---|---|---|
| 110º | 49.45 | ***190101*** |
| 85º | 52.50 | ***190102*** |

## WASHER PUMPS

| Type | Each | Part No. |
|---|---|---|
| 12V vane-type pump with universal fixing bracket. Connection via 2 x 6.3mm blade terminals. | 13.30 | ***190201*** |

| Type | Each | Part No. |
|---|---|---|
| 12V vane-type pump with metal fixing bracket. Replaces Lucas WSB 100. | 16.50 | ***190204*** |

## COMBINED WASHER PUMPS & BOTTLES

| Type | Each | Part No. |
|---|---|---|
| 12V washer pump and bag. Plastic bag (incorporating pump) hangs on metal bracket provided. Supplied with all necessary fittings including push button switch, pipe and nozzles. Approx. 2L capacity. | 16.06 | ***190202*** |

| | | |
|---|---|---|
| 12V washer pump and bottle. Rigid plastic bottle incorporating pump with fixing bracket. Approx. 1.2L capacity. | 15.50 | ***190203*** |
| 24V version of above. | 15.50 | ***190205*** |

## HORNS

| Type | Each | Part No. |
|---|---|---|
| Basic disc horn, diaphragm type. Supplied with bracket. Connection via 2 x 6.3mm blade terminals. 335Hz, 100mm OD, 12V. | 7.70 | ***200101*** |

Compact disc horn. 70mm OD. Diaphragm type with red painted steel body. Supplied with bracket. Connection via 2 x 6.3mm blade terminals. 103dB(A), 335 or 420Hz, 12V.

| Tone | Each | Part No. |
|---|---|---|
| Low (335Hz) | 8.67 | ***200102*** |
| High (420Hz) | 8.67 | ***200103*** |

| Type | Each | Part No. |
|---|---|---|
| Twin Marco electric air horns. Red with chrome grilles. Supplied with relay and mounting kit. 12V, 410-510Hz. | 17.60 | ***200104*** |

| | | |
|---|---|---|
| Twin Marco air horns and compressor. Supplied with relay, tube and mounting brackets. Horn lengths 150 and 190mm. 700-850Hz, 12V. | 21.00 | ***200105*** |

# KITS

## TERMINAL KITS

*Type* — *Each* — *Part No.*

**Insulated Terminal Kit (with Crimping Tool)** — 47.50 — ***160101***
Contains 590 insulated terminals (24 types) and a crimping tool. Packed into a robust plastic case with dividers, and fitted with a carrying handle.

**Insulated Terminal Kit** — 25.02 — ***160102***
Contains 270 insulated terminals (18 types) packed into a robust plastic case with dividers.

**Non-Insulated Terminal Starter Kit** — 15.35 — ***160109***
Contains a selection of non-insulated 6.3mm blade and piggyback terminals and non-insulated ring terminals together with suitable insulation sleeves. 260 pieces in total. Packed in a robust plastic case with dividers.

**Non-Insulated Terminal Professional Kit** — 55.05 — ***160110***
Contains a large selection of non-insulated blade, piggyback, ring and 4.7mm bullet terminals, plus insulation sleeves and bullet connectors. 1000 pieces in total. Packed in a robust plastic case with dividers.

**Bullet Kit (Non-Insulated)** — 28.50 — ***160106***
175 bullets (4.7mm dia) suitable for crimping or soldering in four different wire sizes (0.65 - 3.00 $mm^2$), together with 50 single and 25 double bullet connectors. Supplied in a robust plastic case with dividers.

**HT Terminal Kit**
Contains a selection of straight and 90º HT spark plug and distributor/ coil terminals and covers. 133 items in total. Packed in a robust plastic case with dividers. Contents easily sufficient to make six 4-cylinder vehicle HT lead sets.

*Type* — *Each* — *Part No.*

Kit on its own — 35.04 — ***160107***
Kit plus crimping tool (150601, page 87) — 59.24 — ***160108***



## GROMMET KITS

*Type* — *Each* — *Part No.*

**Wiring Grommet Kit** — 18.50 — ***160104***
Contains a selection of 180 wiring grommets (for panel hole sizes from 6.4mm to 25.2mm) packed into a robust plastic case with dividers.

**Blanking Grommet Kit** — 18.50 — ***160105***
Contains a selection of 180 blanking grommets (for panel hole sizes from 6.4mm to 22.5mm) packed into a robust plastic case with dividers.

## FUSE KITS

*Type* — *Each* — *Part No.*

**General Fuse Kit** — 23.20 — ***160103***
Contains 200 popular automotive fuses. A selection of blade, continental and glass fuses packed into a robust plastic case with dividers.

**Older Vehicle Fuse Kit** — 15.50 — ***160111***
Contains 180 assorted continental and glass fuses packed into a robust plastic case with dividers.

**Blade Fuse Kit** — 13.70 — ***160112***
Contains 100 popular-sized blade fuses packed into a robust plastic case with dividers.

**MULTIPLE CONNECTOR KIT** — 51.03 — ***160115***
Contains a selection of 70 pairs of 6.3mm blade multiple connector housings (as seen on page 15), from 1 to 11 ways. Supplied with 400 terminals. Packed into a robust plastic case with dividers.

## P-CLIP KITS

*Type* — *Each* — *Part No.*

**Brass P-Clip Kit** — 33.20 — ***160113***
Contains a selection of 80 brass p-clips, ranging in size from 5mm to 22mm. Packed into a robust plastic case with dividers.

*contd...*

## P-CLIP KITS *(contd)*

*Type* — *Each* — *Part No.*

**Nylon P-Clip Kit** — 14.52 — ***160114***

Contains a selection of 240 nylon p-clips, ranging in size from 3.2mm to 19.4mm. Packed into a robust plastic case with dividers.

**Steel P-Clip Kit** — 31.42 — ***160116***

Contains a selection of 95 rubber-lined steel p-clips ranging in size from 6.4mm to 25.4mm. Packed into a robust plastic case with dividers.

## INDICATOR KITS

**LED Indicator Kit (12V only)** — *Each* 79.00 — *Part No.* ***170805***

A complete kit of parts to enable you to fit indicators to any 12V vehicle (+ve or -ve earth). Includes 4 x Rubbolite lamps fitted with LED bulbs, 20m twin core cable, flasher relay, dashboard switch, warning light and bracket, crimp terminals and wiring diagram. The power taken for this kit is only approximately 5W (0.3A), so it is ideal for cars with limited or no charging systems, and the LED bulbs are extremely long lasting. Connection details - see page 94.

**Indicator Kit without Lamps**

These kits include all the parts you need (except the lamps) to fit indicators to any vehicle. The kits include 20m twin core cable, flasher relay, dashboard switch, warning light and bracket, crimp terminals and wiring diagram. Available in 6V or 12V. Both kits require the addition of 4 x 21W indicator lamps (see pages 70 & 71). Connection details - see pages 93 & 94.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| 6V | 22.00 | ***170803*** |
| 12V | 22.00 | ***170804*** |

## HAZARD SWITCH KITS

A kit of parts to enable you to convert existing 12V indicators to hazards at the flick of a switch. Kit includes flasher relay, warning lamp, switch, bracket, crimp terminals and wiring diagram. Only available in 12V. For use with either standard or LED-type indicators. Connection details - see page 95.

| *Type* | *Each* | *Part No.* |
|---|---|---|
| Standard bulbs | 15.00 | ***170902*** |
| LED bulbs | 22.00 | ***170903*** |



# TOOLS

## EXPANDING SLEEVE APPLICATION TOOL

*Each* 34.43 — *Part No.* ***150102***

This tool is suitable for applying neoprene expandable sleeves, by stretching them during application.

## CRIMPING TOOLS

### For Insulated Terminals

*Type* — *Each* — *Part No.*

Economy tool for crimping the full range of insulated terminals. Also features a wire stripper and cable cutter. — 2.98 — ***150201***

Tool for crimping the full range of insulated terminals and many non-insulated terminals. Also features a wire stripper, cable cutter and cushion handles. — 4.86 — ***150202***

Heavy duty ratchet tool for crimping the full range of insulated terminals. This tool ensures the correct pressure is applied whilst crimping the terminal. — 24.20 — ***150203***

### For Non-Insulated Terminals

*Type* — *Each* — *Part No.*

Economy tool for crimping many non-insulated terminals. Also features wire stripper and cable cutter. — 3.37 — ***150204***

Robust and heavy duty tool for crimping many non-insulated terminals. Also features wire stripper and cable cutter. — 10.84 — ***150205***

Ratchet tool for crimping many non-insulated terminals. This tool ensures the correct pressure is applied whilst crimping the terminal. — 28.92 — ***150206***

Heavy duty ratchet tool for crimping HT terminals (such as those shown on page 20) to HT cable. — 27.76 — ***150601***

Rachet crimping tool for 4 sizes (10, 16, 25 & 40 sq mm) of open end and closed end battery cable terminals. Overall length of tool 325mm. — 49.50 — ***150209***

## BULLET TOOLS

| Type | Each | Part No. |
|---|---|---|
| Bullet crimping tool for non-insulated bullets. | 23.10 | ***150207*** |

| | | |
|---|---|---|
| Bullet inserting tool for inserting soldered or crimped bullets into connectors. | 15.50 | ***150301*** |

## CABLE STRIPPERS

| Type | Each | Part No. |
|---|---|---|
| Automatic cable strippers and cutters for cables between 0.5 and 6.0mm$^2$. This tool is also suitable for crimping insulated and non-insulated terminals. | 11.49 | ***150401*** |

| | | |
|---|---|---|
| Automatic cable strippers for cables between 0.5 and 3.0mm$^2$. | 12.97 | ***150402*** |

## CABLE CUTTERS

| Type | Each | Part No. |
|---|---|---|
| Heavy duty cable cutter for cutting copper cables up to 70mm$^2$. Tool length 235mm. | 16.38 | ***150501*** |

| | | |
|---|---|---|
| For cutting copper cable up to 1.6mm diameter. 125mm length, jaw length 13mm. 45 degree blade angle. PVC handle covers, medium carbon steel construction. | 7.97 | ***150701*** |

# SOLDERING

## SOLDER

| Type | Each | Part No. |
|---|---|---|
| Fluxed core solder. 18 swg (1.2mm diameter). 500g roll. | 18.30 | ***220101*** |

| | | |
|---|---|---|
| 5 metres of the above (approx. 40g). | 2.05 | ***220102*** |



## FLUX

| | Each | Part No. |
|---|---|---|
| "Fluxite" soldering paste. Contains zinc and ammonium chlorides in petroleum grease. 100g tin. | 7.44 | ***220201*** |

## SOLDERING IRONS & ACCESSORIES

| Item | Each | Part No. |
|---|---|---|
| Antex XS25. 25W, 240V soldering iron. British made to EN-60335-2-45. Supplied with 1.5m of cable and 3mm diameter replaceable tip (see 220303). | 18.40 | ***220301*** |

| | | |
|---|---|---|
| Antex MLXS25. 25W, 12V soldering iron. British made to EN-60335-2-45. Supplied with 4m of cable with crocodile clips to power from a car battery. 3mm diameter replaceable tip (220303). | 24.20 | ***220302*** |

| | | |
|---|---|---|
| 3mm diameter replacement tip for XS25 and MLXS25. | 3.70 | ***220303*** |

| | | |
|---|---|---|
| Soldering iron bench stand ST4. | 6.08 | ***220304*** |

| | | |
|---|---|---|
| Antex GASCAT60 gas (butane) soldering iron. Supplied with 2.4mm diameter tip and safety cap with integral lighting flint. Spare tips available (see 220402 and 220403). | 28.90 | ***220401*** |

Spare tips for GASCAT60.

| Type | Each | Part No. |
|---|---|---|
| 2.4mm diameter | 8.04 | ***220402*** |
| 4.8mm diameter | 8.04 | ***220403*** |

| | | |
|---|---|---|
| Antex GASCAT60 gas soldering iron kit. Contains GASCAT60 iron (220401) plus hot air tip, flame tip, hot knife tip and sponge in plastic case. | 49.77 | ***220404*** |

| | | |
|---|---|---|
| Solder sucker. Aluminium pump with teflon tip. | 6.48 | ***220501*** |

# TESTING/CHARGING

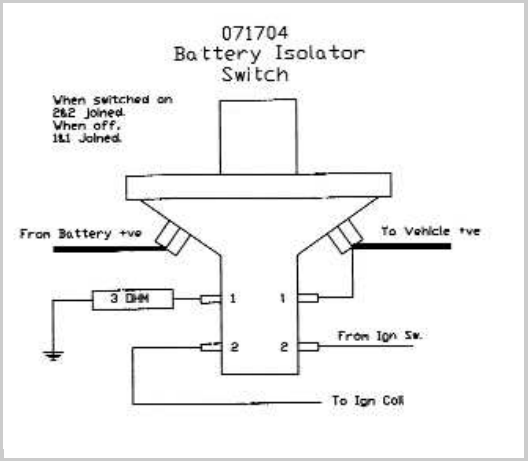
| Item | Each | Part No. |
|---|---|---|
| 12V vehicle charging tester. This unit indicates, using a series of LEDs, the state of charge of the battery, and also whether the charging system is working correctly. Hand held, but will also magnetically attach to any ferrous surface. Supplied with probe and alligator clip connections. | 24.53 | ***240101*** |
| Screw driver circuit tester, for voltage testing on 6V, 12V and 24V systems. | 2.95 | ***240102*** |
| Chrome plated brass circuit tester, for voltage testing on 6V, 12V and 24V systems. | 4.62 | ***240103*** |
| Induction ammeter. 30-0-30 Amps. Indicates approximate current and direction when clipped to cables. 57mm dia. | 18.20 | ***240104*** |

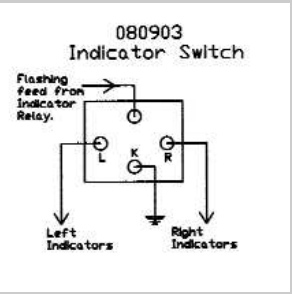
## ACCUMATE 6/12V BATTERY CONDITIONER

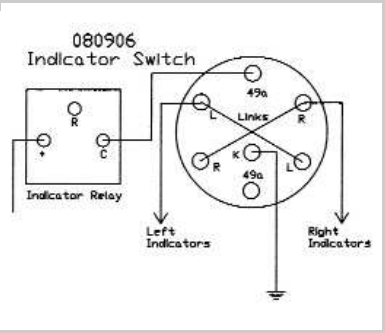
| | Each | Part No. |
|---|---|---|
| Designed to automatically charge and monitor batteries with no danger of over-charging regardless of time. Suitable for all 6 and 12V lead acid batteries from 4Ah to 75Ah, making it perfect for owners of older vehicles which are not used on a daily basis. Operation is completely automatic. The unit uses a 1.2A constant current charge as the main stage, while monitoring the battery voltage. When this reaches a pre-set cut off point, it then switches to an intermediate constant voltage 'float charge'. Only when it has detected that the battery is properly charged, will it switch to the final stage for correct long-term battery maintenance. If at any time it detects that the battery has discharged, it will automatically revert to the constant current stage. | 36.30 | ***210107*** |
| Accumate lead adapter, to enable connection to the vehicle via the cigarette lighter socket. | 9.08 | ***210108*** |

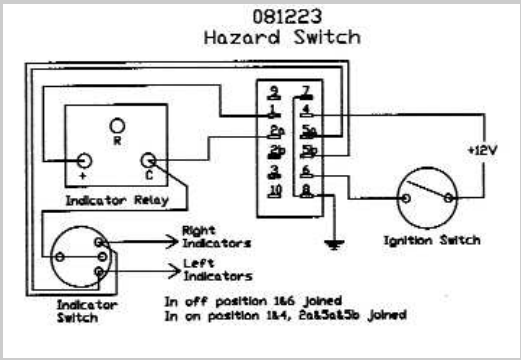


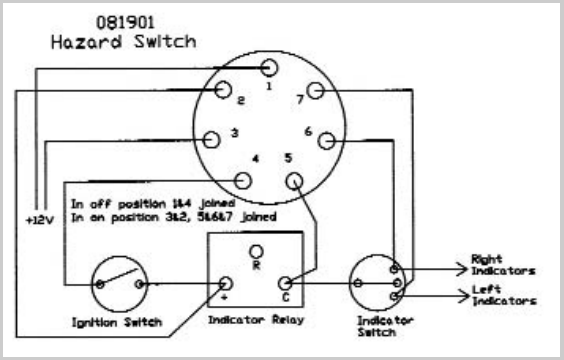
# WIRING DIAGRAMS

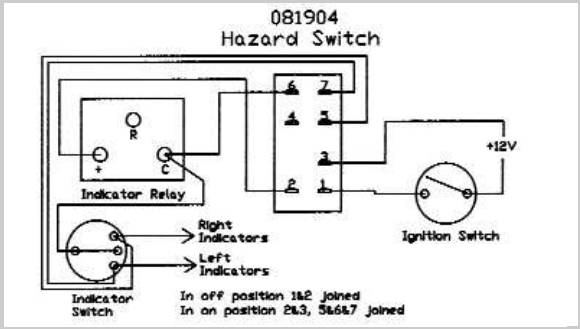


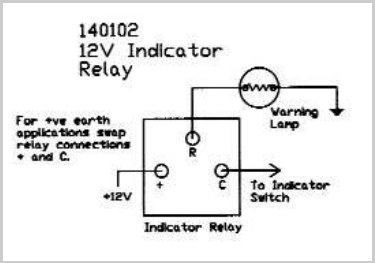



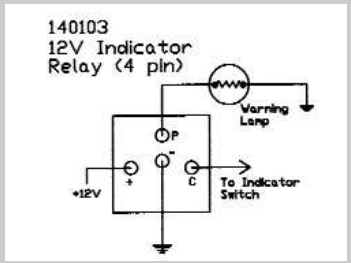



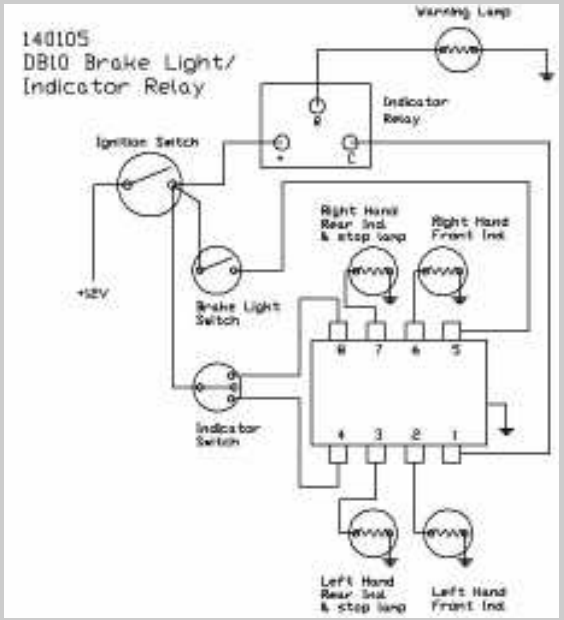



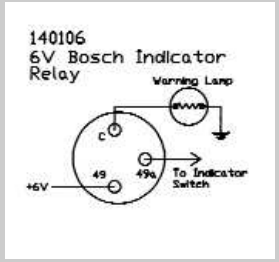



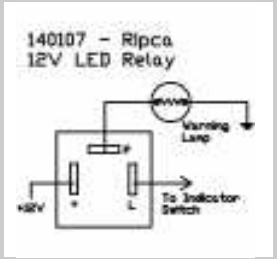


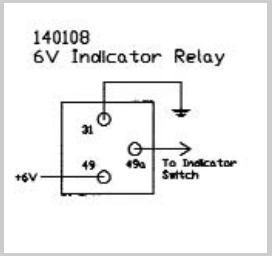



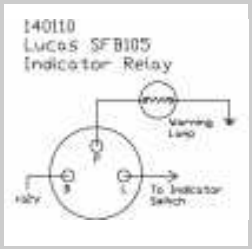



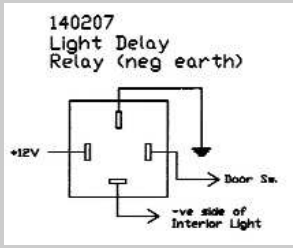



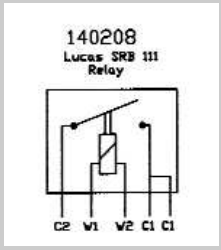



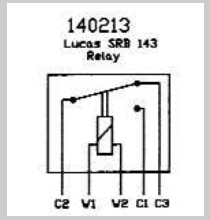


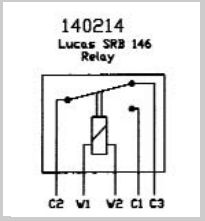



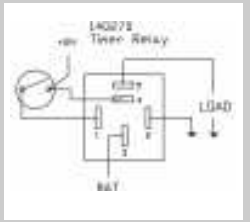



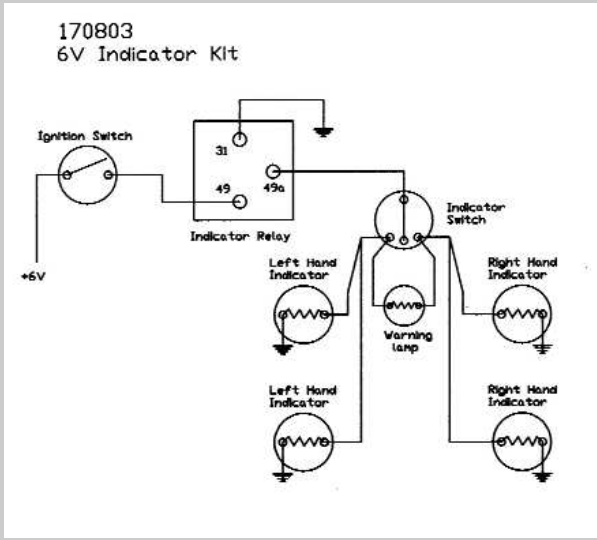



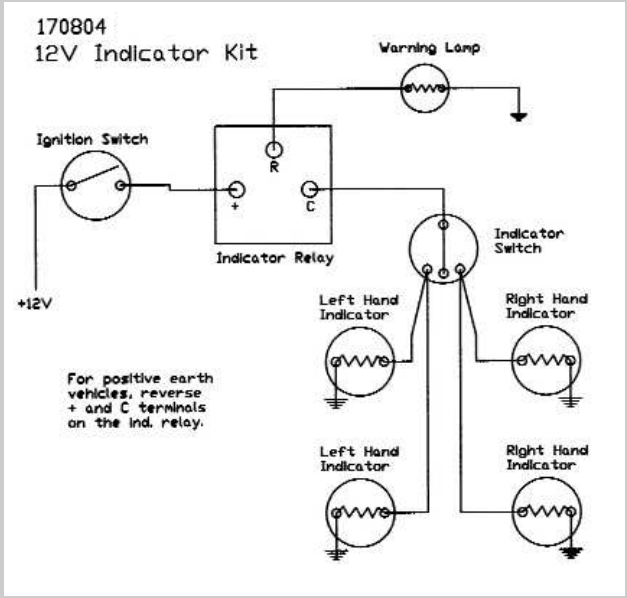



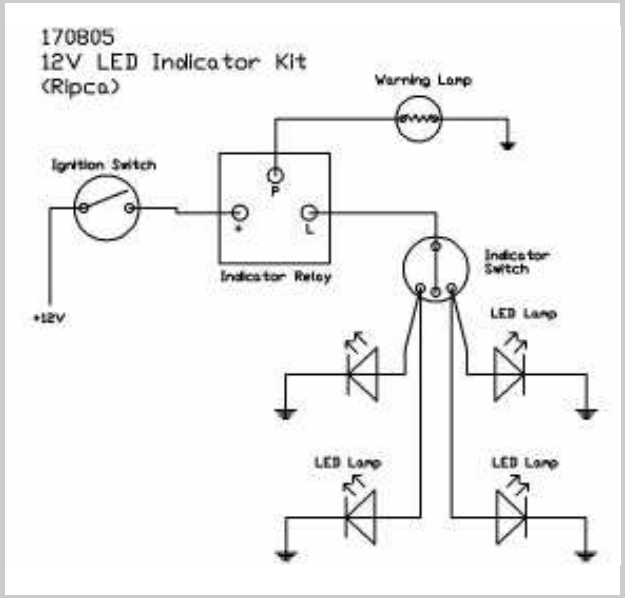




**Alternative Relay Markings**

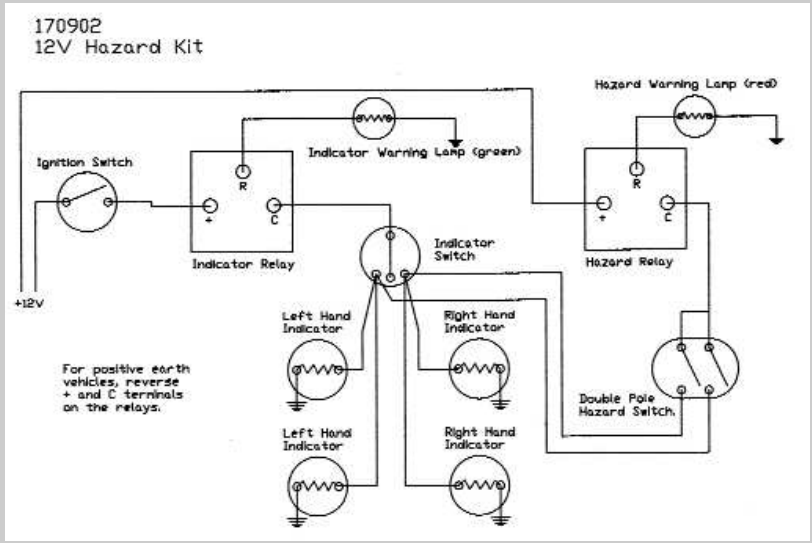
| | |
|---|---|
| Power In: | +, 49, X |
| Flashing Signal Out: | C, 49a, L |
| Warning Lamp: | R, P |
| Earth: | -, 31, K |

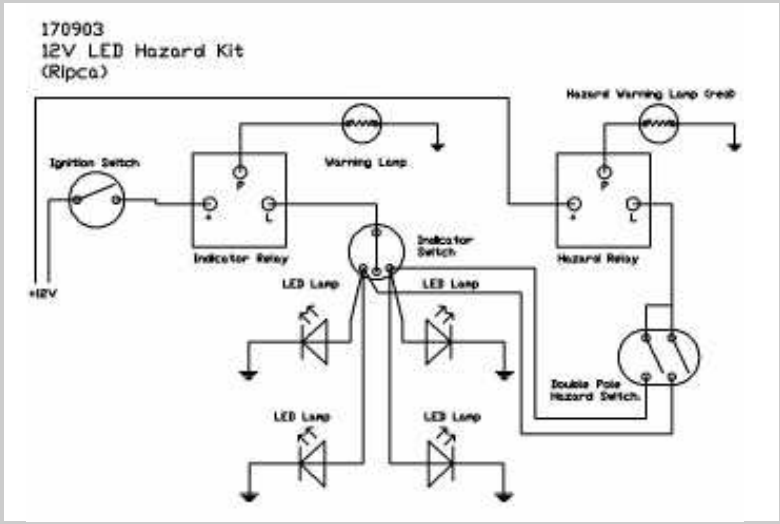


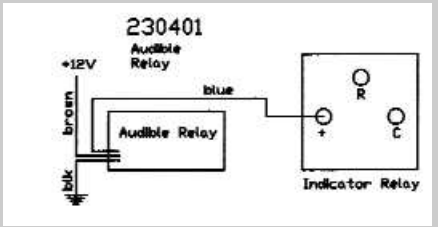

170804
12V Indicator Kit
Warning Lamp
Ignition Switch
R
+
C
Indicator Relay
Indicator Switch
+12V
Left Hand Indicator
Right Hand Indicator
For positive earth vehicles, reverse + and C terminals on the ind. relay.
Left Hand Indicator
Right Hand Indicator

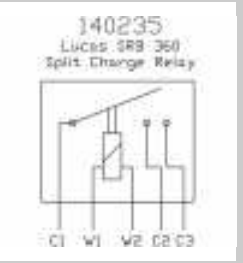

170805
12V LED Indicator Kit
(Ripca)
Warning Lamp
Ignition Switch
P
+
L
Indicator Relay
+12V
Indicator Switch
LED Lamp
LED Lamp
LED Lamp




170902
12V Hazard Kit
Hazard Warning Lamp (red)
Indicator Warning Lamp (green)
Ignition Switch
R
+
C
Indicator Relay
Indicator Switch
Hazard Relay
+12V
Left Hand Indicator
Right Hand Indicator
For positive earth vehicles, reverse + and C terminals on the relays.
Double Pole Hazard Switch.
Left Hand Indicator
Right Hand Indicator


170903
12V LED Hazard Kit
(Ripca)
Hazard Warning Lamp (red)
Ignition Switch
Warning Lamp
P
+
L
Indicator Relay
Indicator Switch
Hazard Relay
+12V
LED Lamp
LED Lamp
Double Pole Hazard Switch.
LED Lamp
LED Lamp


230401
Audible Relay
+12V
blue
brown
blk
Audible Relay
R
+
C
Indicator Relay


140235
Lucas SRB 360
Split Charge Relay
C1 W1 W2 C2 C3

# NOTES


HEREFORDSHIRE
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"Probably the country's leading auctioneers of automobilia..."
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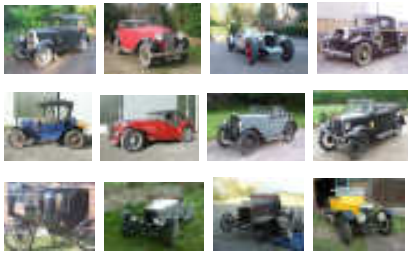
Email: info@hvauctions.com
Web: www.hvauctions.com




# INDEX


| | | | |
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| Alternator Plug | 18 | Ignition Coils - Acorn Terminal | 21 |
| Battery Accessories | 22 | Ignition Coils - Lucas | 21 |
| Battery Cable Connectors | 24 | Ignition Coils - Standard | 21 |
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