

# Pop Browns

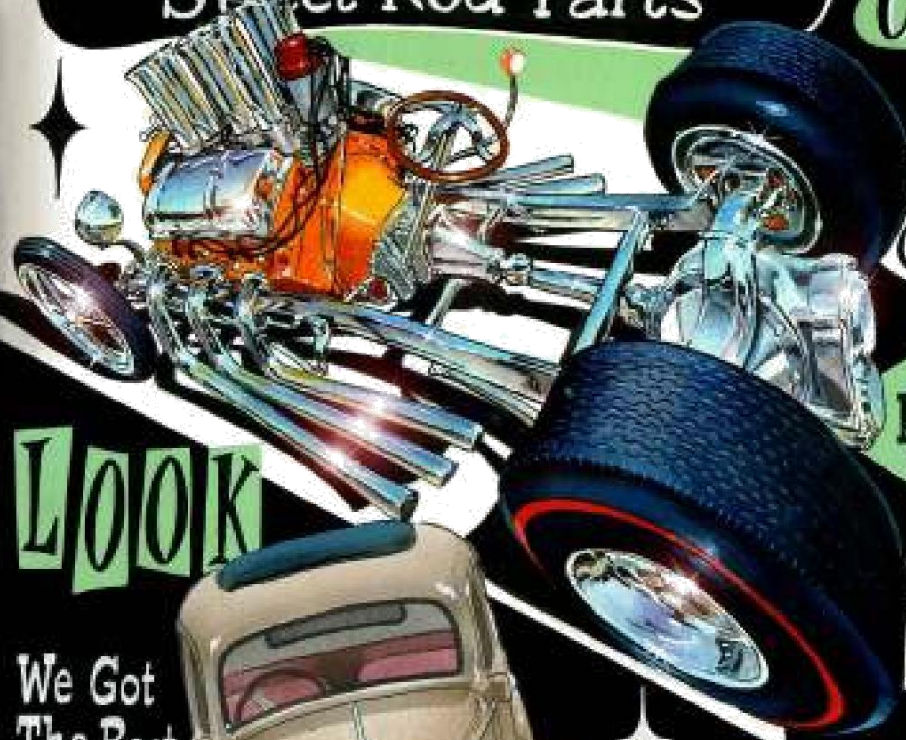
## Street Rod Parts



**NEW!!**

14<sup>TH</sup> EDITION

Catalogue



**LOOK**

We Got  
The Best  
Sit-Up  
And Beg  
Parts

1939  
1959

MAIL  
ORDER

NEW  
KRAZY  
IDEAS

TO  
YOUR  
DOOR

- Cool T-Shirts
- Wiring Kits
- Custom Parts

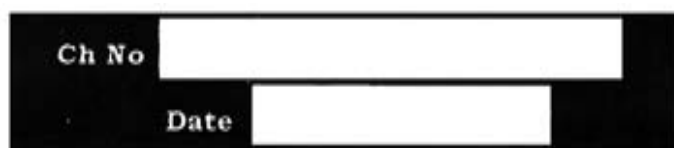
**CHECK IT OUT**

*Chris Freggott*



## Body and Chassis VIN Plates

These identity plates are the finishing touch to firewalls. The body ID plates have areas for engine numbers and model types. The early plate, **PBH 3005** was used on Pre-war cars such as Model Y's and Model C's. The later plate, **PBH 3001** is for Popular's, Prefects and Anglia's. The third plate **PBH 3006** is identical to **PBH 3005** but without the "Made in England" legend to suit Model A's, B's and 34's. They all have silver boxes on a black background and come with stainless steel self-tapping fixing screws. Our chassis number plate, **PBH 3000** is very popular with MOT testers & the BIVA (SVA). We have increased the chassis number box to provide more room for modern, longer, chassis numbers. The finish matches our other plates and is supplied with stainless steel fixing screws. We can stamp your vehicle numbers onto our plates as an extra service, but will require the data in writing to avoid mistakes.



**Chassis Number Plate PBH 3000**

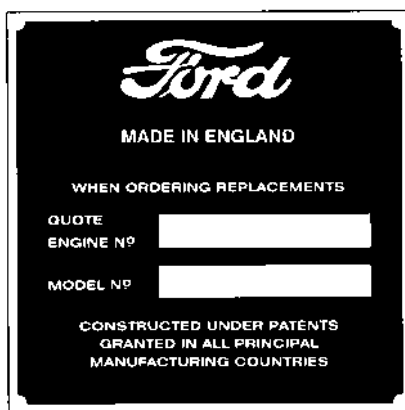
*Note; Fords normally have the chassis number stamped on the left hand (nearside) chassis leg just in front of the fire wall. They are often engraved between two stamped stars and are difficult to find.*

**PBH 3000** Chassis number plate.  
**PBH 3005** Model Y & C-ID body plate.

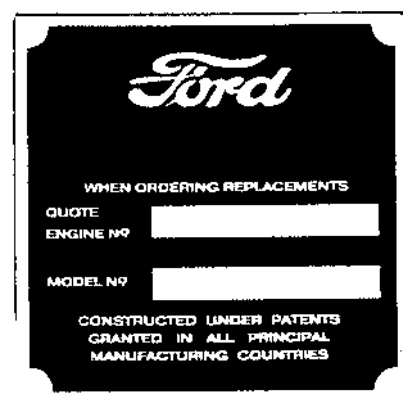
**PBH 3001** Anglia & Popular Body ID plate.  
**PBH 3006** Plain Body ID plate.



**Late ID Plate**



**Early ID Plate**



**Plain ID Plate**

### Other Body Plates

We stock patent number plates and body number plates for American models such as Models A, B and 1934. The patent number plates are black and silver while the Briggs body number plate is brass and yellow. All provide a finishing touch to your vehicles firewall.

**PBH 3100** Model A, 28-31 patent plate  
**PBH 3110** 1932 [B] & 34 patent plate.  
**PBH 3120** 1932 Murray body No. plate.



**PBH 3120 Murray Body Plate**



**PBH 3110 1932-34**

**Tech Tip:** For extra security, stamp your chassis number in two separate places on your chassis. Hide one & make the second in an accessible location in case of theft.

## Body Hardware 1

### Door Hinge Pin

Made from stainless steel with a polished head, these pins are fitted with self-broaching splines. They are extra long & will suit most early Ford hinges, or any other vehicle using a 0.275" diameter x 2.7" long pin.

**PBN 0021** Pop Door Hinge Pin St/Steel

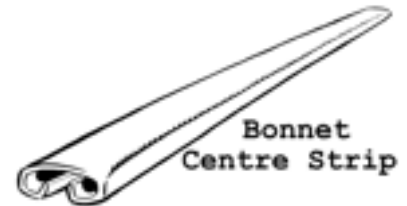


Door Hinge Pin

### Bonnet Centre Strip

This centre strip is polished & corrosion resistant & although kept for the Pop, at 40" long they can be trimmed to fit a number of other vehicles. Perfect for replacement of that tired & split original strip.

**PBN 0027** Bonnet Centre Strip



Bonnet Centre Strip

### Bonnet End Brackets

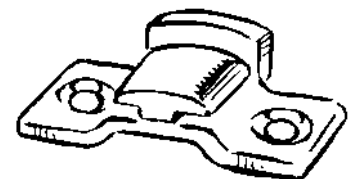
To be used with our centre strip, this bracket will fit Ford Pops (though it is not a replica) as well as other cars. A stronger unit than standard, you will need two per vehicle. Repro bonnet ends are available in pairs with the correct spacing to line up the bonnet. They include stainless steel fixing screws & the special square nuts as original.

**PBN 0027/B** Repro Bonnet Ends

**PBN 0028** Bonnet End Bracket

**PBN 0025** Bonnet End Screw 1/4 UNC Stainless Steel

**PBN 0026/N** Special Square 1/4 UNC nut



End Bracket

### Grill & Bulkhead Bumper

This small bumper rubber is usually missing, and fits a large round hole in either side of the grill shell and bulkhead. Its job is to help prevent the bonnet sides rattling, and with **PBR 2007** (bonnet webbing) stops the paint being marked.

**PBR 1012** Grill Bumper



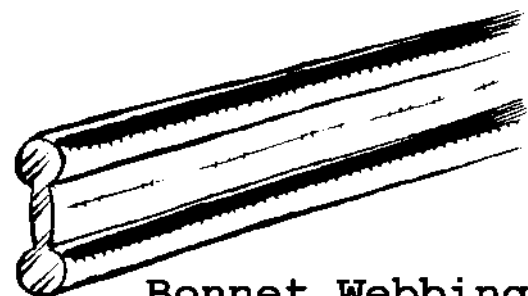
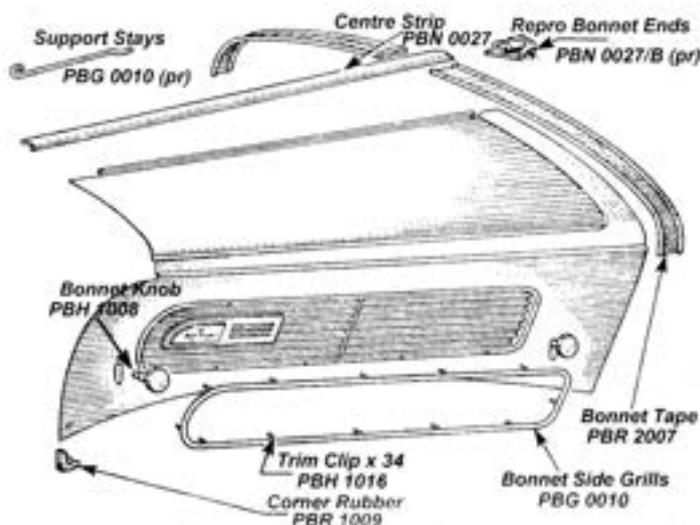
Grill Bumper

### Bonnet Webbing

Bonnet webbing is the perfect solution for preventing chaffed paint. We stock 5/8" wide double beaded webbing as per original. This can be bolted or riveted to the bulkhead and grill shell. We can supply suitable 3mm stainless steel button head bolts, washers and nylock nuts.

**PBR 2007** 5/8" Double Beaded Bonnet Webbing

**PBS 3007** Kit of Stainless Steel Button Head Bolts and Nuts



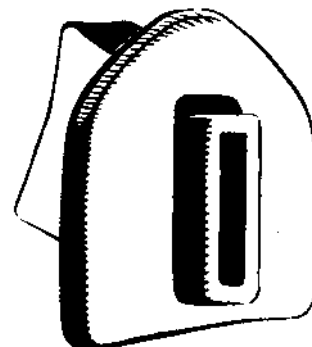
Bonnet Webbing

**Tech Tip:** Do not be tempted to stretch bonnet tape too much when installing, as it will wear quicker.

## Body Hardware 2

### Front Bumper Iron Rubbers

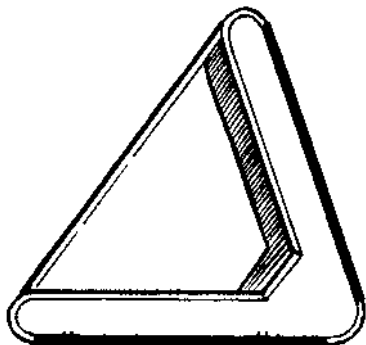
These are an exact copy of those elusive front bumper bracket rubbers. Made in a modern rubber, **PBR 1001** is therefore less inclined to shrink and crack than those tired old originals. They will fit fibreglass or steel wings as a finishing touch to prevent rattles and chaffing. The rubbers are sold in pairs.



**Front Bumper  
Iron Rubber**

### Pop Bonnet Corner Rubber

Protect the corners of your newly painted bonnet with these rubber corner rubbers, **PBR 1009**, sold in pairs. We include small stainless steel button head bolts to secure these corner rubbers.

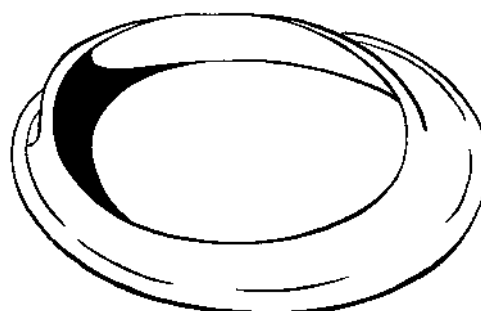


**Bonnet Corner  
Rubber**

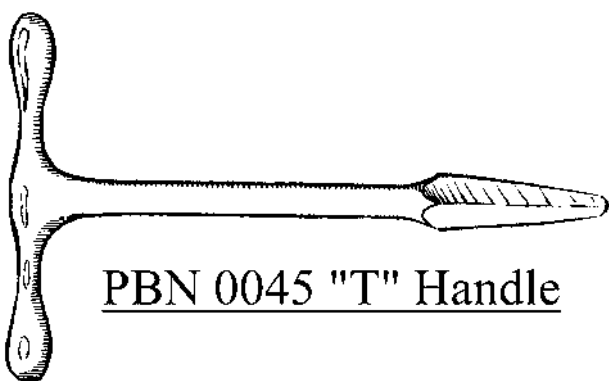
of the tank enters the body at an acute angle. The grommet therefore, is in fact an oval. Produced in a modern rubber

### Fuel Tank Grommet

This grommet **PBR 1000** is peculiar to Ford Anglia's and Popular's, as the neck



**Popular Tank Grommet**



**PBN 0045 "T" Handle**

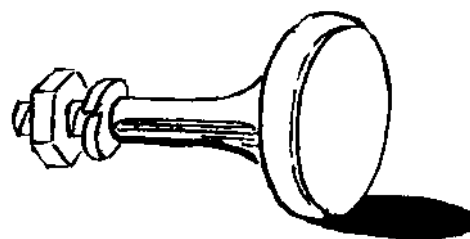
### 'T' Handle Boot Key

Lots of Popular's did not have a locking handle fitted, but relied on a 'T' handle, which was originally stored in a spring clip above the parcel shelf. For those wishing to retain this system of boot locking, we can supply this replacement key.

**PBN 0045** 'T' Handle Boot Key

### Bonnet Knobs

These Chrome Plated bonnet knobs are direct replacements for lost or damaged originals. We also produce a stainless steel version for those looking for the best quality. They do not include a nut as shown as they screw straight into the original Ford latch.



**STANDARD KNOB**

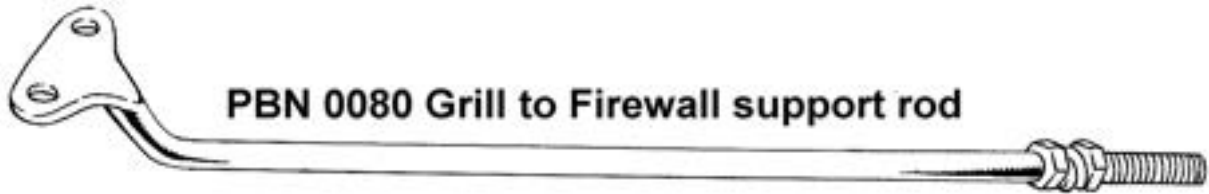
**PBH 1008** Standard Knob

**PBH 1008/s** Standard Knob in stainless steel (set of Four)

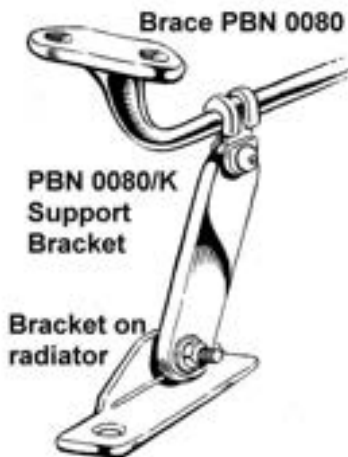
**Tech Tip:** A small smear of silicone grease will help the front bumper irons to pass through the rubbers on assembly.

## Body Hardware 3.

### Bulkhead to Grill Shell Rod



This rod, **PBN 0080**, is normally a rusty original whereas ours are made from polished stainless steel and is a faithful reproduction of the Ford part. The front webbed plate is attached to the grill shell using the screws that hold the central bonnet hinge end bracket. This rod adjusts the free play on the bonnet centre strip. A modified firewall will need a special end bracket. There is a lot of thread on the rod.



### Support Kit

This kit, **PBN 0080/K**, in polished stainless steel helps brace the top of the radiator to the grill shell. A rubber-lined clip helps damp out vibrations and all the nuts and bolts are stainless steel button heads for a smooth look.

### Bonnet Support Rod

Our bonnet support rods are reproduced in stainless steel and are exact replicas of the originals. Though not fitted to every vehicle, they are an excellent addition and do a good job of holding the bonnet up. They also reduce the risk of those "Crows Feet" cracks, which start in the corners of the bonnet by

the hinge strip.

**PBN 0039**

Pair of Polished Stainless Steel Bonnet Support Rods

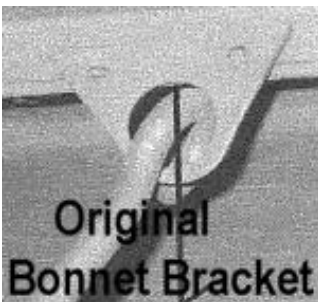
**PBN 0039/K**

Kit to fit above rods

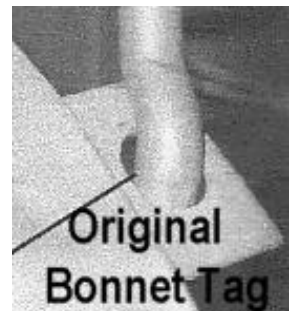


### Bonnet Support Rod Kit

We have a kit to allow you to add them to cars not originally fitted with them. Again laser cut from stainless steel and then hand polished, the tags can be bolted on using small button



head bolts and nylock nuts. Anti rattle grommets are included. Full instructions with photos are supplied. Note original Ford tags are shown, ours are a different shape and slightly thicker. A third tag, not shown, has a Terry clip used to park the support rod. The kit does both sides.



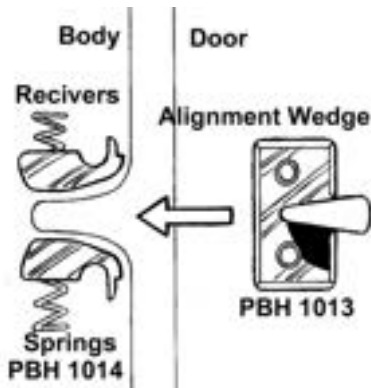
**Tech Tip:** A dab of silicon grease will help fit the grommets to the tags as well as lubricating the rod in the grommet.



## Door Hardware 1

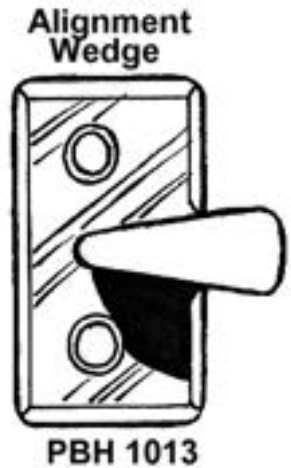
### Alignment Wedge

Our door alignment wedges **PBH 1013** are cast in gunmetal for longevity and chrome plated to provide a high quality finish. Stainless steel raised head countersunk screws, **PBN 0026**, are supplied to match the Ford door. This wedge is very important in aligning the door.



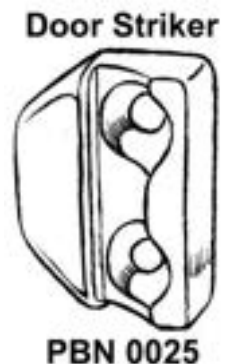
### Receivers

This part **PBH 1014** mates with the alignment wedges and fits into the door post. The originals are usually badly worn with missing or broken springs. As they help align the door & take some of the door weight they need to be in very good condition. They are not easy to install but well worth the effort.



### Catch Striker Plate

Again this striker plate, **PBN 0025**, is very important, especially as it is holding the door shut. Though not produced by us this item is better made than the factory units and is chrome plates for a neat finish. Again our screw **PBN 0026** is used to secure them.



### Door Fittings Screw

These special stainless steel screws **PBN 0026** have a raised head and are countersunk with a 1/4" UNC thread. They are used to fix alignment plates, striker plates and bonnet centre strip brackets, sometimes in conjunction with a special square mild steel nut, **PBN 0026/N**.

### Door Check Strap



Not identical to the original Ford Popular part but our strap **PBN 0032** will replace them completely. A large rubber bumper is fitted to a mild steel strap. They are sold in pairs.



### "D" Rubber

This small "D" shaped rubber, **PBR 1013**, fits into the rectangular slot half way up the door jam. It reduces rattling when the door is shut as well as preloading the door catch mechanism.



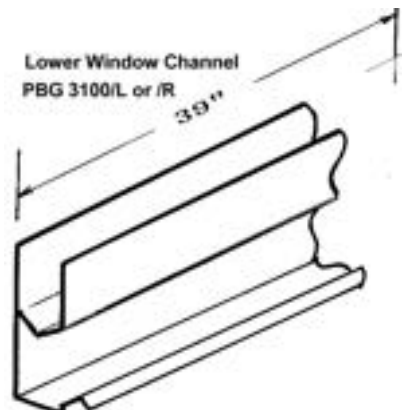
### Grill & Door Bumper

If you have a hole at the top of your pop's B post it should be filled with our bumper rubber **PBR 1012**. Not all cars use this item but they are useful as they align the top of the door & can easily be added.

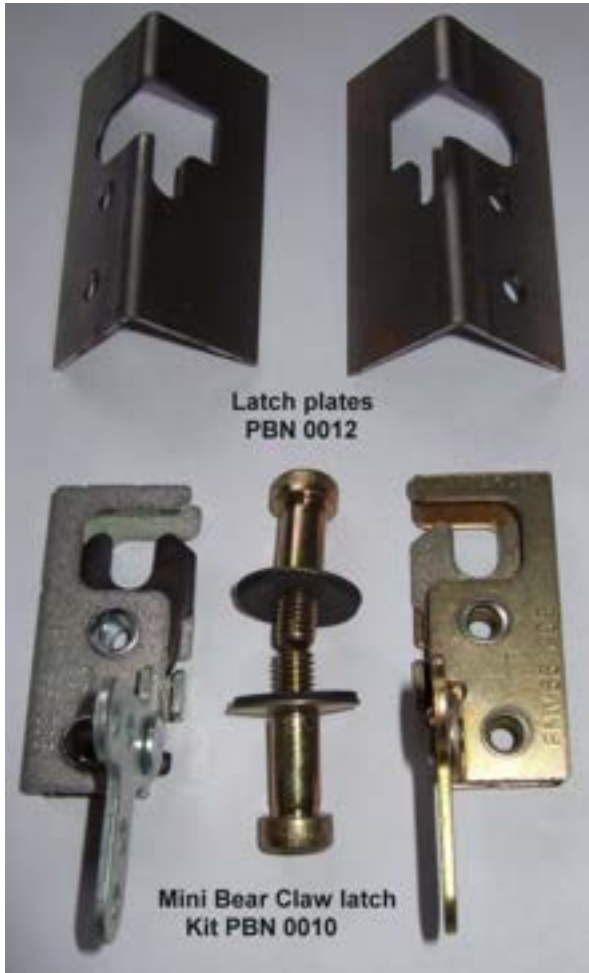
### Lower Window Channel

This channel **PBG 3100** fits to the bottom of the door glass. A faithful replica of the original Ford part, just add **R** or **L** for the right or left hand version. Use rubber strip **PBR 2017** to fit the channel to the glass.

**Tech Tip:** Check the drainage holes in the bottom of your doors once a year to prevent water retention, casing rusting.



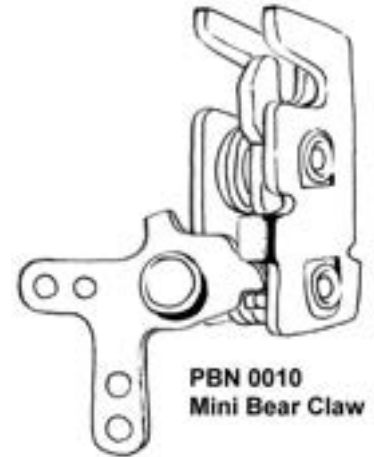
## Mini Bear Claws & Parts



### Mini Bear Claw Latches

Our Mini Bear Claw latch kits work best on narrow doors where internal room is limited. Ford Anglia's, Popular's and Model A's are ideal candidates. The kit, **PBN 0015**, comes with a pair of latches, two strikers and a set of stainless steel 5/16" UNC button head bolts. The strikers have 5/16" UNC threads and Nylock nuts. A 90° lever with 4 x 5.9mm holes allows for the attachment of actuating rods. The latches measure 28.7mm wide, 63.5mm high and 1.35mm thick and have two 1/4" x 20 (UNC) mounting holes. They have a double click action for greater security - this feature is a must if your vehicle is inspected for **BIVA (SVA)**.

Our latch plates, **PBN 0012**, are laser cut from mild steel and can be welded into your door jam, they are sold in pairs.



We are also stock another set of Mini Bear Claw latches, **PBN 0010**. Similar in appearance to **PBN 0015** they will fit the **PBN 0012** latch plates but are a single-click design. **THEY ARE NOT RECOMMENDED FOR SUICIDE OR FRONT OPENING DOORS.** Customers have used them on boot lids and rear doors.

***We are working on a new design of fitting plate, which can be bolted into place allowing installation in GRP bodies or into a steel body where welding is not available.***

### Door Handle relay lever for Bear Claws

This relay, **PBN0016**, is designed to work with the standard square drive shaft of a traditional door handle as used by Early Fords and lots of other makes. It is laser cut from 8 mm mild steel with a square socket, cut to slip over a 5/16" square shaft. A 4mm stainless steel grub screw locks it onto the shaft to allow precise alignment for a rod to be connected to the actuating lever of a "Bear claw" latch. A choice of two ratios are available for up to 6mm diameter actuating rods, which can be connected to the latches. The levers can be fitted either horizontally or vertically and are available in pairs.



### Door Check Strap

Not identical to the original Ford Popular part but our strap **PBN 0032** will replace them completely. A large rubber bumper is fitted to a mild steel strap. They are sold in pairs.



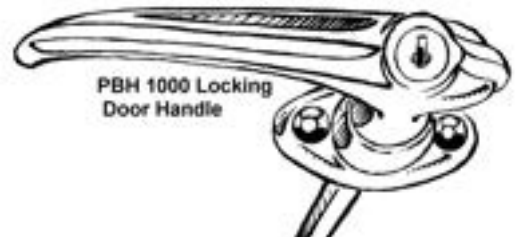
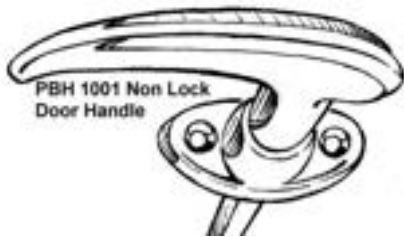
*Bear-claw latches take a lot of load from the alignment wedges.*

## Handles

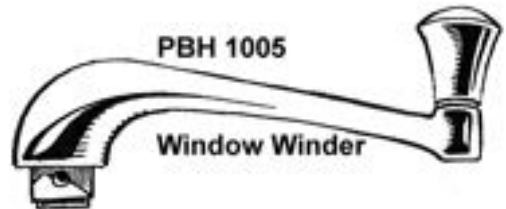
### Popular Handles

We have replacement door handles for Upright Fords such as Popular's, Anglia's and Prefects but will fit Model Y's and other vehicles. The mounting plinths have 2 mounting holes on 1.43" centres. The mounting screws are **PBH 1003**. We can organise pairs of handles with matching keys when stock allows.

- PBH 1000** Locking chrome door handle, supplied with 2 keys  
**PBH 1001** Matching chrome non-locking door handle.  
**PBH 1002** Locking chrome boot handle, supplied with 2 keys.  
**PBH 1003** Handle screws, s/steel special headed.



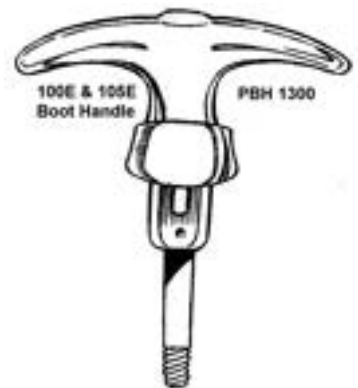
Interior handles fit onto the shaft of the door handles and the window winders fit the standard window regulators. Both use the chrome plated escutcheon and pins to hold them on.



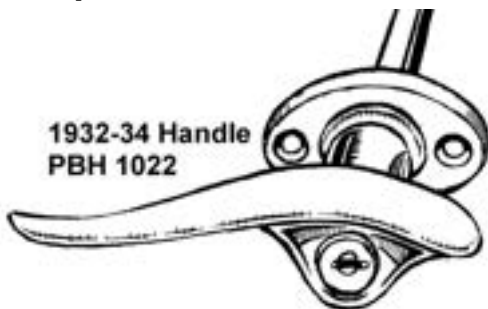
- PBH 1005** Window winder handle  
**PBH 1006** Inner door handle  
**PBH 1007** Escutcheon and pin

### Boot Handles

We stock two boot handles, **PBH 1003**, fits Popular's etc and is good for most vehicles. The other, **PBH 1300**, is specifically designed for Ford 100E's and 105E's but works on Model B's and 34's



### Replica 1932/34 Door Handles



Replicas of the Model B & Model 40 closed car door handles, **PBH 1022**, but with the addition of a built in lock, the originals having separate locks. Two keys are supplied & the finish is in high-quality chrome plating. The plinth has two fixing holes 35mm apart & is flat so will not fit roadsters & some other models. The shaft is 65mm long & 8mm square. Use **PBH 1003** screws to secure.

**Tech Tip:** Drill a hole in the square end of a boot handle & tap 4 mm. Fit a button head bolt & washer to prevent the handle being removed from the out side.



## Body Rubbers & Seals 1

**PBR 2000** Windscreen rubber to suit Anglia's & Popular's, but would work with many other applications using 6mm [1/4"] glass. The windscreen fits inside the body, 8' 4" [2.54m] in length

**PBR 2001** Rear screen rubber for Anglia's, Popular's & Prefects. The same section as the windscreen, you will need 6' 6" (2 mtrs) in length

**PBR 2003** Anglia & Popular rear side window rubber, 12 feet [3.65m] per car.

**PBR 2004** Flexible window channel for 6mm [1/4"] glass, 14ft needed for a Popular. Fitting kit, **PBS 3005**, stainless steel countersunk screws.

**PBR 2006** "Fur Flex" door to body draft seal, tacks to wooden tack strip around door opening. Around 10 feet [2.6m] needed per door on Poplar's and Anglia's. Black only, secure with tacks.

**PBR 2007** Bonnet tape, double beaded 5/8" [16mm] wide webbing designed to prevent squeaks & rattles. Popular's or Anglia's use 8 feet [2.5m] for the grill & bulkhead. We stock a fitting kit **PBS 3007** small stainless steel button headed bolts and nuts to replace the rivets

**PBR 2008** Black plastic wing piping, 6mm x 38mm [1/4"x 5"], 30 feet per car.

**PBR 2008/ S** Black plastic wing piping 4.8 x 25mm [3/16 x 1"].

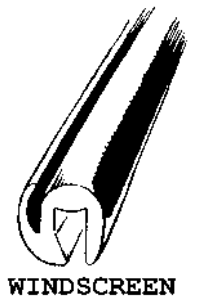
**PBR 2010** Rubber "U" section, for use with our roof panel or edging cover.

**PBR 2011** Rubber chassis strip, 40 x 1.5mm, has many other uses.

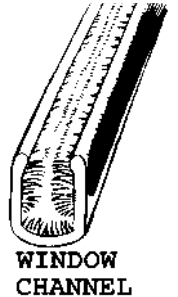
**PBR 2012** "J" Section roof rubber for original fabric inserts, 14 feet for Anglia's and Popular's, more for Prefect's and Model Y's.

**PBR 2013** Boot seal, note that this seal is attached to the lid and should contact the inside edge of the rain channel. You will need 9 feet for a Popular. See diagram below for fitting

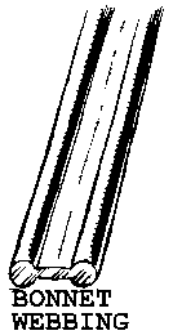
**PBR 2015** Wedge shaped door seal, which can be glued to the door. 10 feet per door.



WINDSCREEN



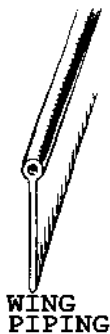
WINDOW CHANNEL



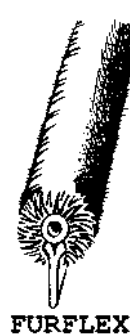
BONNET WEBBING



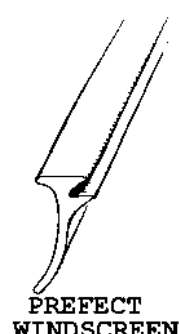
WEDGE SEAL



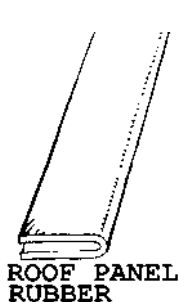
WING PIPING



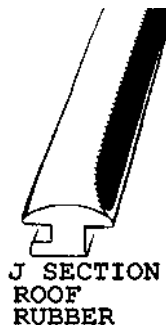
FURFLEX



PREFECT WINDSCREEN



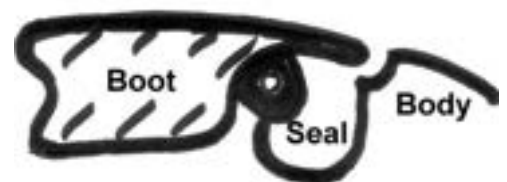
ROOF PANEL RUBBER



J SECTION ROOF RUBBER



BOOT SEAL



**Tech Tip;** I have found that silicon grease is a very good lubricant when fitting glass seals. Do not use it before painting your car as it will cause a reaction called "Fisheyes" with most types of paint.

## Body Rubber and Seals 2

### Door Seal

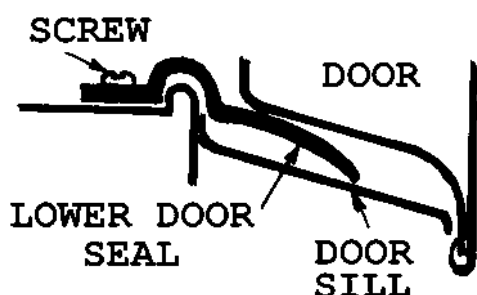
The diagram opposite shows the installation for our **Hot Rod Super Seal** door seal. The sticky back tape is an easy fix. We sell the three types of seal 6-mm **PBR 2050**, 8-mm **PBR 2055** and 10-mm **PBR 2060** in 20 feet rolls.



### Deep Pile Draught Strip

Deep pile draught strip, **PBR 2005** installed into the door. One side screws to the inside of the door and the other to the inner window moulding. Prevents window rattle and water ingress. Use our fixing kit, **PBS 2999** & our stainless steel counter sunk screws, to attach the strip to the door.

### Lower Door Seal



This large rubber strip is screwed to the chassis and overlaps the doorsill. Our stainless steel screw kit, **PBS 3008** can be used to secure it.

**PBR 1014**

**PBS 3008**

Lower door seal

St/st Screw kit

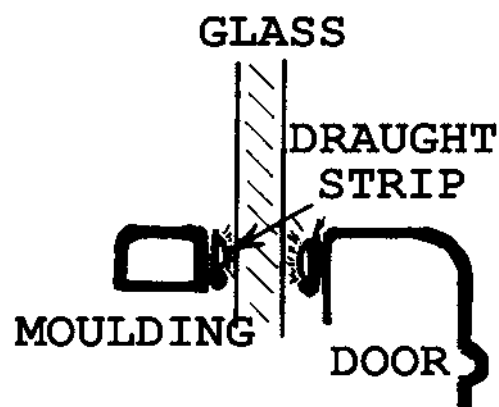


### Rubber Glazing Strip

This thin rubber strip [not shown] is used to wrap the edge of windscreen glass before it is fitted to its frame. It measures 25 x 0.8mm. It can be used to insulate glass in various situations.

**PBR 2017**

Rubber Glazing Strip



### Ridge Window Channel

This rigid window channel will accept 6mm glass. Vehicles such as Model A's, 1932 and 1934 Coupes use this type of channel as it is self-supporting. It is supplied in 2 metre lengths.

**PBR 2018**

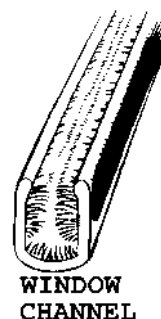
Ridge Window Channel.

### Sticky Back Strip

A peel off backing exposes the glue on this rubber strip allowing it to be attached to any painted surface, which needs protection from another layer on top of it. Can be used in place of bonnet webbing, though it is not quite so robust. The strip measures 16 x 3mm and is black in colour.

**PBR 2019**

Sticky Back Rubber Strip

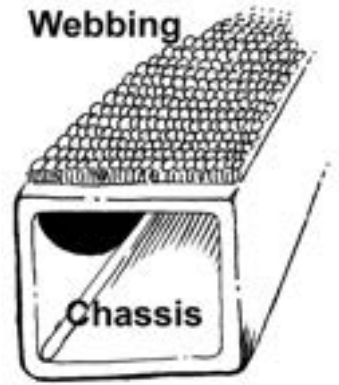


**Tech Tip:** When planning windows make up a false one in MDF to check the shape and the operation of the window. When you are happy, take this as a template to your glass supplier.

## Body Rubbers and Seals 3

### Chassis Webbing

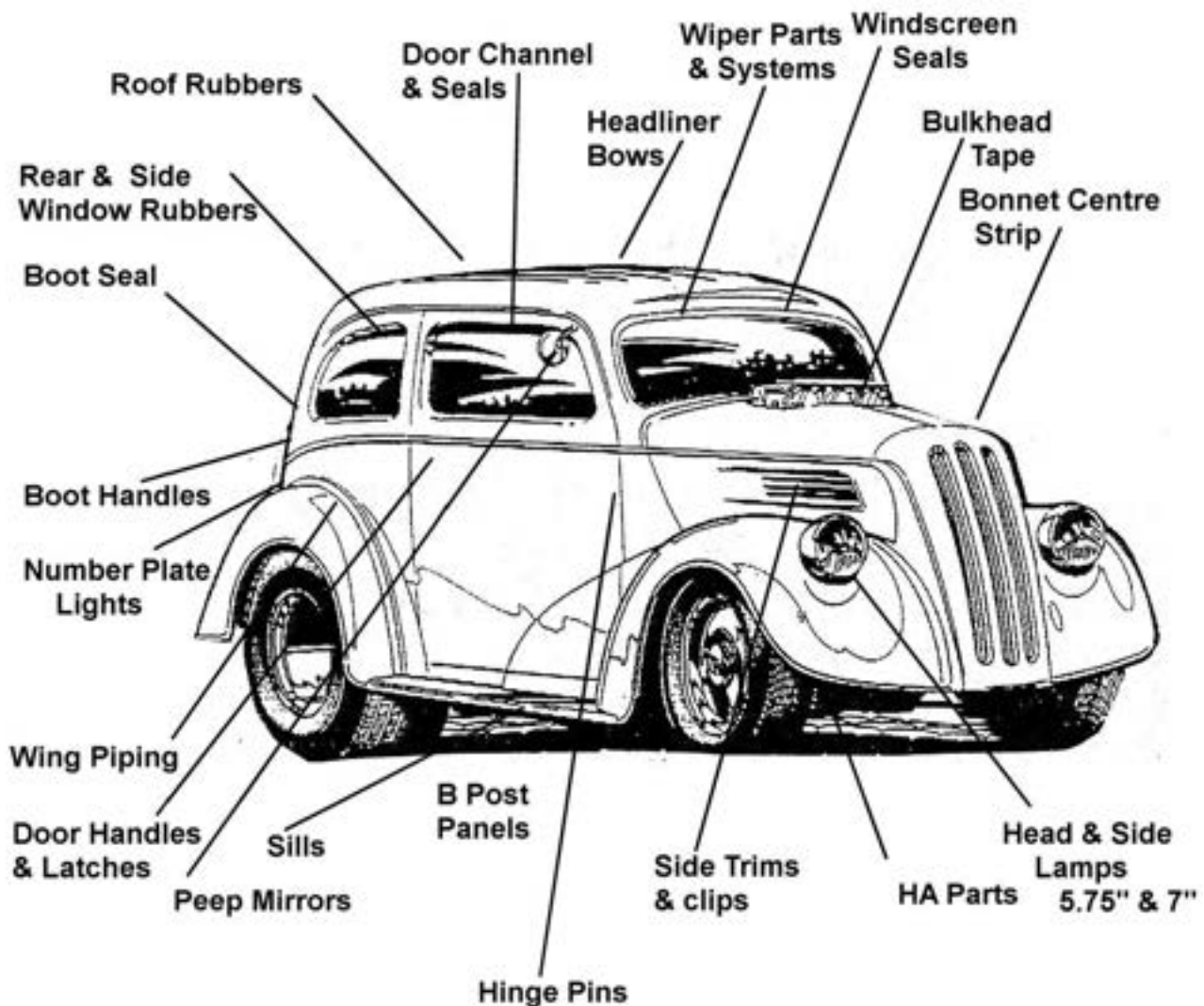
This rubber material is ideal for mounting bodies to chassis as well as body panels and window glass to the regulator. One **PBR 2011**, measures 38 x 1.6-mm the other **PBR 2011/50** measures 51 x 1.6-mm and both are supplied in 2.5 meter rolls. We suggest the use of contact adhesive to fix the rubber strip in place, and a hole punch is an ideal way to make holes for body bolts.



### Fuel Tank Grommets



We carry two other fuel tank filler neck grommets. **PBR 1000/E** fits **Ford 100E's** and one for a **1940 Ford** is **PBR 1002**. Although very similar as they both fit fuel filler hoses at 90° there are small differences.



**Tech Tip:** If you are fitting a fabric roof use sort thick wedges to temporary secure the material in the roof channel. Then fit the "J" section rubber & trip the exes fabric.

## Roof Parts

### Wooden Roof Bows

Our bows, **PBH 1019**, are exact replicas of your missing roof bows. They are very necessary if you are restoring your original fabric roof, or replacing it with one of our GRP panels. All four are included in our kit.

### GRP Roof Panel

Our G.R.P roof panel is produced in a matt black textured finish and is difficult to tell from the original. However, it has the following advantages:- It does not balloon at speed, will not fade and is far less susceptible to damage than the original fabric roof. One other advantage is that it is produced slightly oversized.

This is especially helpful if your roof retaining moulding is rusty, the overlap allowing this to be concealed. Extra length is provided to accommodate lightly chopped roofs. Full instructions are supplied & you will need our 'U' section rubber edge seal.

**PBF 0011** Popular Roof Panel Fully Detailed

**PBR 2010** Rubber 'U' Section Edge Seal

### Original "J" Section Rubber

Used on restored vehicles, this rubber locks the fabric roof material into the edge section of the steel roof. We sell the section in 14' lengths, so if you are using it on a Prefect or other vehicle, please let us know the amount you require.

We can supply a kit of materials to cover original roofs, this comes complete with the outer fabric & a sheet of foam to replace all the original parts.

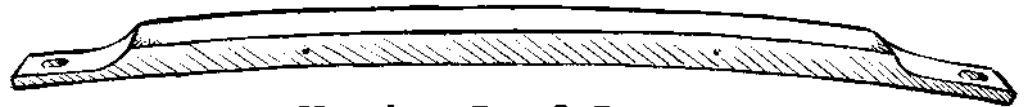
**PBR 2012** Original J Section Rubber Roof Locking Strip

**PBH 1500** Black Roof Replacement Kit

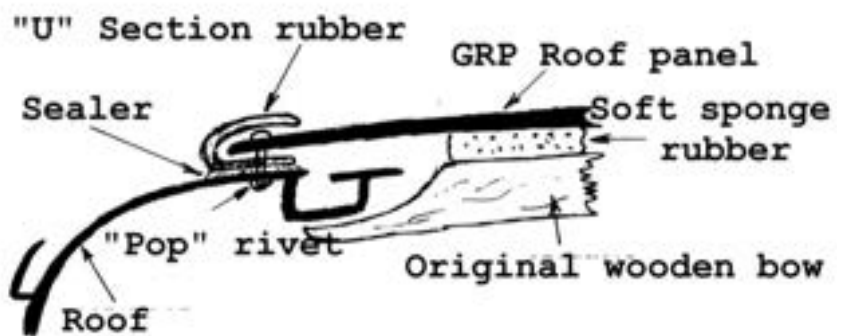
### Internal Head Lining Bows

Produced in stainless steel to prevent rust stains on the head lining, these replacement wire bows are necessary as they hold the head lining up. A full kit of seven is supplied, which includes new fixing screws etc. Identical to the original apart from the material

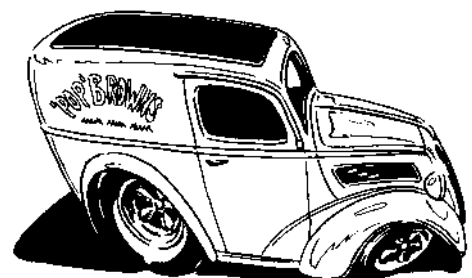
**PBH 1017** Stainless Steel Head Lining Bow Kit



Wooden Roof Bow



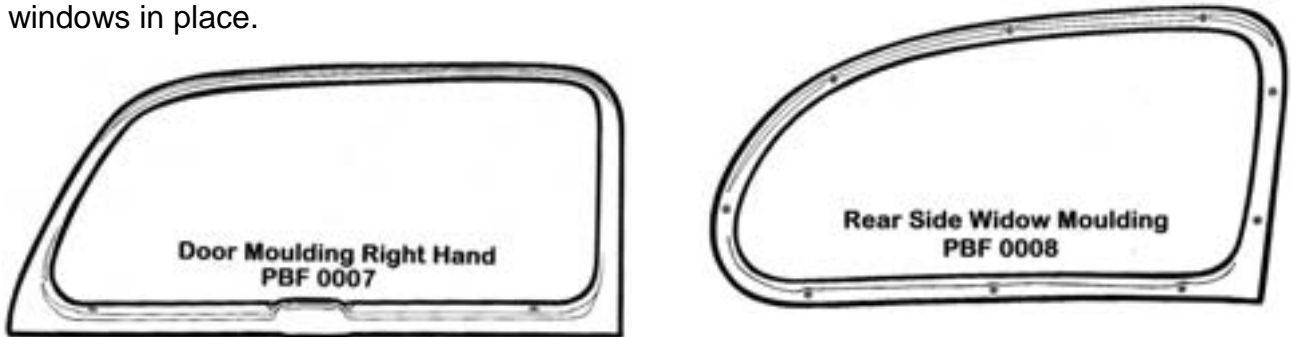
### **J SECTION ROOF RUBBER**



**Tech Tip:** Use a small section (Avery) wire mesh under the roof material when replacing original roofs. This will add a layer of support, cover with hessian.

## Door and Window Mouldings

Our reproduction window mouldings are a very close copy of the Ford originals, but with added strength. When they are being moulded, a core is included to increase their rigidity. Also the door mouldings, **PBF 0007** have threaded brass inserts included to accept small brass screws to be used instead of the standard self tapers used by **Ford**. The material, while not unbreakable, is far more resilient than the original Bakelite and will not suffer the drying out suffered by the originals. The side rear mouldings, **PBF 0008** also hold the windows in place.



The rear moulding, **PBF 0009** was only used on early vehicles, as the later cars had a complicated rear windscreen rubber, not available for years. It works well on any Popular/Anglia and is an ideal finisher when installing a head lining, and can also be covered to match. The standard finish is a chocolate brown similar to the various colours **Ford** used.



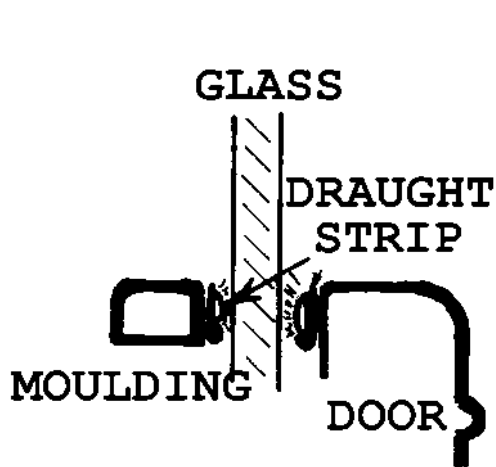
### Economy Mouldings

We produce a copy of our mouldings in fibre glass. The quality is not as high as our usual mouldings, but are useful for cars with top chops, as they are easy to cut down. We sell a set of two front and

two rear side mouldings, **PBF 0020** and a rear screen moulding, **PBF 0021**. They are available as a special order.

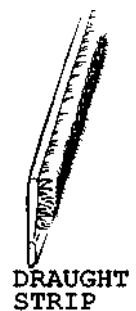
### Moulding Screws

We stock special stainless steel screws, **PBS 3001** with a raised head which are also countersunk. They are sold in packets of nine, enough for one moulding.



### Moulding Seals

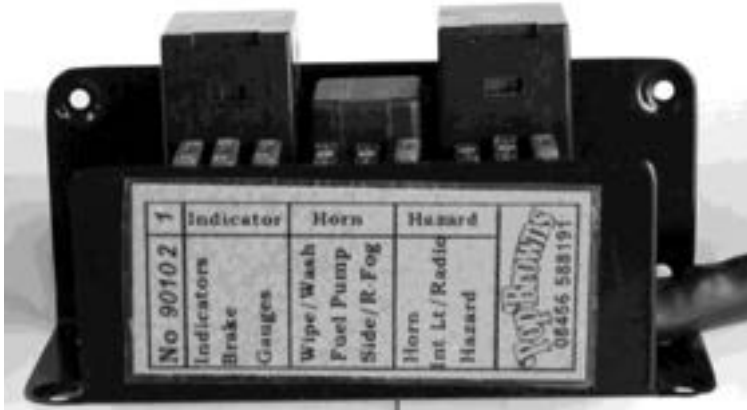
The doors use a strip of Deep Pile Draught Strip, **PBR 2005** on both sides of the window glass. The inner seal bolts to the door moulding using the brass screws supplied with it. These seals need to be looked after as they reduce the ingress of water in to the door and wipe the glass clean. The other function is to prevent the glass rattling. We stock a more modern wiper seal which can replace the outer door mounted seal, **PBR 2310**.



**Tech Tip:** Store your mouldings between sheets of wood to keep them flat till you are ready to use them.



## Wiring Kit



### 9 Fuse Wiring Kit

Our 9 fuse wiring kit **PBE 1125** has been in production for a while now and is proving very popular. We have used British components where possible and are now building them in house. The fuses and relays are mounted in a metal guard, which can be mounted on its back or upright. All the basic circuits such as lights, ignition, wipers and washers, Hazard lamps are catered for. Both

electronic Hazard and Flasher units as well as a horn relay are fitted and all circuits have dedicated blade fuses to protect them. We are including a "Maxi Fuse" for over all protection and have plenty of Lucas type colour coded wire and there are diagrams and Tip sheets to help you install the kit. The wires use the new thin wall system with a high quality outer and twice the current carrying capacity of the older cables as well as being half the size. There is a feed for a rear fog lamp for those of you putting your vehicles though BIVA (SVA). As always, our technical advice is only a low cost phone call away. **(0844 544 0960) Note: NEW Number.**

A loom kit **PBE 1126** is now in stock, which allows the use of our LED flasher unit **PBE 0120/LX**. It is plugged into the flasher socket on the fuse box with a flying socket on the other end accepting the larger base of the new flasher unit.

We plan to introduce other add on looms as the need arises the first being a system for electric radiator fans **PBE 1127** complete with heavy duty relay, base and wiring.

### Maxi Fuses

The fitting of a Maxi fuse **PBE 0105** into the main feed wire provides protection against faults on your wiring loom. They come in a series of capacities from 20 amps to 100 amps. We use an 80 amp version in our 9 fuse kit. A special Maxi fuse holder **PBE 0104** is supplied including large capacity terminals, a clear plastic cover and clip on mounting plate complete with snap in studs to mount the holder onto your body or chassis. They also can be stacked together if you are using several. Don't forget to carry a spare fuse.



### In Line Fuse Holder



We use these in line fuse holders **PBE 0137** when adding items such as electric radiator fans or power windows. The holder is water resistant and therefore ideal for under bonnet use. They have a maximum rating of 30 amps (use a Maxi fuse for higher ratings) and use the standard medium size blade fuses.



**Tech Tip:** Always check your earth wires. There is a small one attached to our wiring panel which provides the earth for the relays and needs careful earthing.

## Fuse Panels Etc

### Inline Fuse Holder

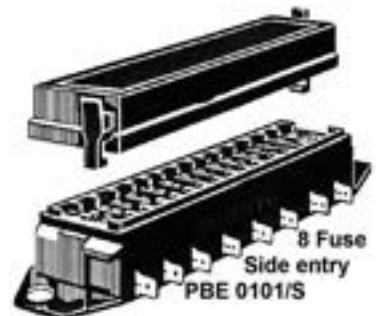
This inline fuse holder **PBE 0137** is water resistant and works well in engine compartment. We recommend it for radiator fans; it is useful when adding circuits to existing wiring. Uses normal blade fuses from 3 amps to its maximum of 30 amps.



### Fuse Boxes



If you are making up your one wiring loom or just updating an old loom one of these fuse boxes could be the answer. One **PBE 0101** allows the wiring through the base and can be surface mounted or back mounted though, for example, a fire wall. The hole should measure 27 x 88-mm with two 5-mm holes on 105-mm centres, with captive nuts. The other box **PBE 0101/S** can only be surface mounted with plain holes and has side mounted spade connectors. Both use 8 of the normal blade fuses.



### Maxi Fuses

A Maxi fuse **PBE 0104**, is the usual blade fuses big brother and is the first line of defence for your wiring. It comes with terminals and a clear top cover making it easy to see blown fuses. There are lugs on the back and sides allowing you to "stack" units if necessary as well as clips, which can be used to snap holders onto your body panels. We add a Maxi fuse to our wiring kits. The fuses **PBE 0105** are produced in a range of values from 30 amps to 80 amps; the full list is in our price list.

### Extractor

A very clever tool the blade fuse extractor **PBE 0102** makes a difficult job easy. Squeezing one end to open the claws at the other, slip them over the fuse and pull the fuse out. They are cheap enough to have one in your vehicle and one in your tool box.



### Installation Tips for Wiring Looms.

An easy way to get started is to secure the panel, usually under the dash, then run the wires out to the items they control in an H formation. The panel is situated on the central bar of the H & the legs run out to the front & rear lamps. To organise them while you lay them out, try paper covered wire ties used to secure freezer bags; this allows you to add wires one at a time. It is a good idea to test the continuity of each wire as you go & each circuit as it's finished. Do not cut any wires until after you have finished wrapping the loom in tape & securing it. Always leave a little more than you think you will need, as it is much easier to cut more off than add it back on. Don't forget to add earth wires where necessary, it is better to add a couple of unnecessary earths.

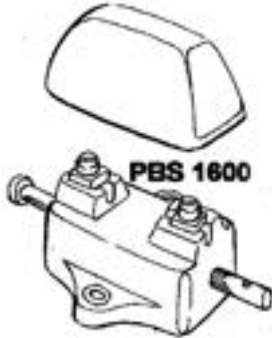
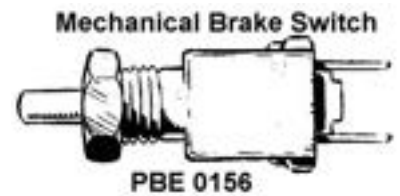
When fault finding, start at the supply for the particular circuit, check the fuse & test logically though the circuit. Do not presume components such as switches, etc, are working, test them! A cheap multi-meter is ideal for fault finding.

**Tech Tip:** Be careful when wiring in electric radiator fans, they use high currents. Therefore they are best wired directly from a main feed such as the battery stud on the starter motor via an inline fuse holder and as least a 40 amp relay

## Switches 1

### Stop Lamp Switches

The first version is a mechanical switch, **PBE 0156**, as well as being used as a stop lamp switch, could also double as a handbrake warning light switch. The body has a ½ UNF thread & two 1/4" spade terminals & the switch is designed to work from the brake pedal.



The second version, **PBS 1600**, is used on motor cycles and some older vehicles. Fit it one way and it can be used as **PBE 0156**. Reverse it and attach a light spring to the hole in the switch shaft and the other to the brake pedal.

**PBE 0156** Mechanical stop lamp switch

**PBS 1600** Push pull stop lamp

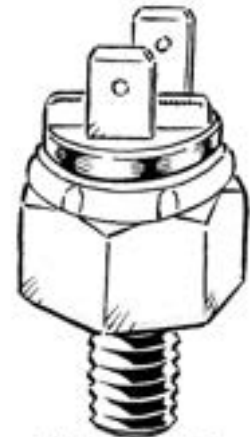
The third type is the older highly successful hydraulic switch. Three models are stocked, identical in appearance, but with different

threads & are again fitted with two 1/4" spade terminals.

**PBE 0129** 3/8" UNF stop lamp switch

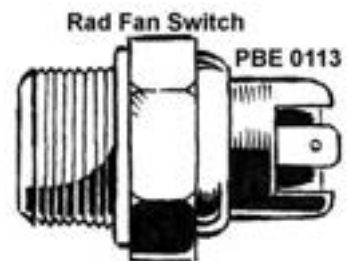
**PBE 0129/M** 10mm metric stop lamp switch

**PBE 0130** 3/8" BSP stop lamp switch (while stocks last).



### Electric Fan Switches

Recommended for use with our electric radiator engine fans. One version, **PBE 0113**, has a 22mm thread & the other, **PBE 0124**, 14mm, both have two ¼" spade terminals. Designed to have a low cut in temperature & a wide operating range, they work well with our relays. The 14mm unit can be used with our adapter, **PBE 0125**, to fit into older Chevrolet cylinder heads (14-mm x ½" NPT) but you will need **PBE 0125/L** for later (14-mm x 3/8" NPT) heads. We stock both 22-mm and 14-mm brass and alloy switch bosses, which can be added to your radiator. If you just require a Simple on/off switch, **PBS 1100** has now been up-rated to 25 amps.



**PBE 0113** Radiator fan switch 22mm 86-81°C (185-176 F)

**PBE 0113/H** Radiator fan switch 22mm 90-80°C (194-185°F)

**PBE 0113/L** Radiator fan switch 22mm 87-70°C (189- 158°F)

**PBE 0113/A** Radiator fan switch boss, alloy 22mm

**PBE 0113/B** Radiator Fan Switch Boss 22mm Brass

**PBE 0124** Radiator Fan Switch 14mm 87-82°C (189-158F)

**PBE 0124/H** Radiator Fan Switch 14mm 87-82°C (189-158F)

**PBE 0124/L** Radiator Fan Switch 14mm 95-85°C (203-185° F)

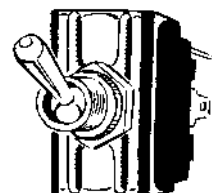
**PBE 0124/XL** Radiator Fan Switch 14mm 72-67°C (162-153° F)

**PBE 0124/W** 14-mm copper sealing gasket for switches

**PBE 0125** Radiator Fan Switch Adaptor (Chevrolet) ½" NPT

**PBE 0125/L** Radiator Fan Switch Adaptor (Chevrolet) 3/8" NPT

**PBS 1100** Simple Switch on/off, 25 amps



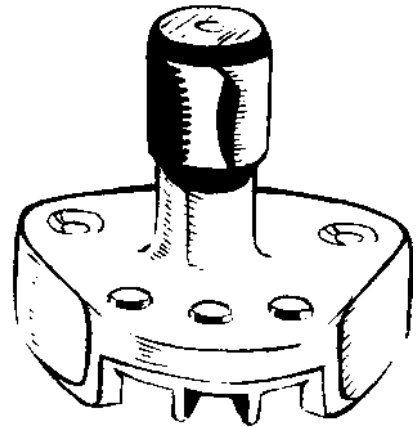
*Tech Tip:* When using American Halogen stop lights, always use a relay to prevent stop-lamp switch burn out.

## Switches 2

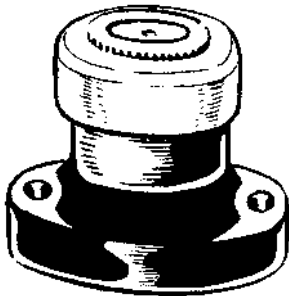
### Floor mounted dip switch

Floor mounted headlamp dip-switches suit early vehicles with little or no provision for steering column mounted switchgear. They also eliminate one more switch from your dashboard. The one we stock, **PBS 1120**, has an aluminium body with a black plastic knob and stands 60mm high. The base has two

5mm fixing holes set on 38mm centres. Three screw terminals labelled 56 for the feed, 56a for headlamp main beam and 56b for dipped beam are also in the base.



**PBS 1120**



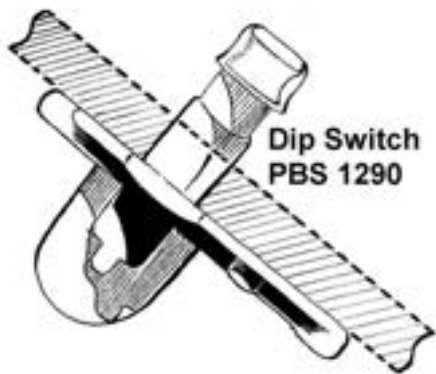
**PBS 1125**

Another version much smaller, **PBS 1125**, can be used with our headlamp-dipping relay, **PBE 0161**,

as it is a "momentary On" switch. It could also be used to operate a floor mounted windscreen washer. Two 4.5mm holes on 38mm centres provide mounting, and two screw terminals are hidden in

the base. A silver plated knob tops the switch and it is 32mm high.

A third type, **PBS 1290**, is American and designed to fit through the floor. This works well with an angled foot board. A 19-mm hole is needed in the floor and three ¼ UNC fixing holes are tapped into the switches base. Wiring instructions and terminal screws are included.

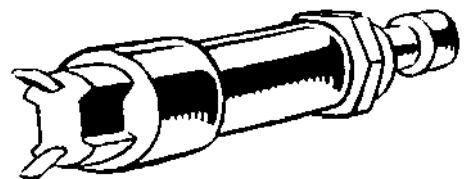


Dip Switch  
**PBS 1290**

### Micro Switch

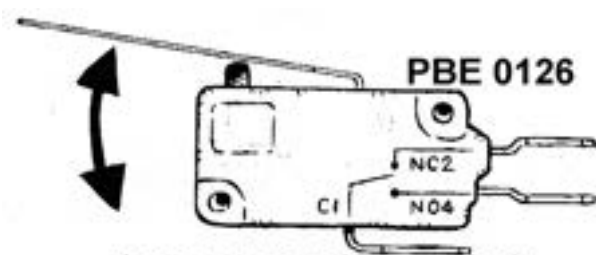
A small black nylon switch to fit a 7.4mm hole and a length of 35mm with a small black button. Connection is by small tags, which need to be soldered to your wiring. Available in three types, normally open contacts [NO], **PBE 0163**, for use under handbrake levers when the switch needs to be depressed to be on. Normally closed [NC] **PBE 0164**, which are ideal for door courtesy lights, glove box lids of any circuit where the switch is 'On' until

depressed. The third type, **PBE 0165**, is a combination of both types, which can be used as a courtesy light switch and linked to an alarm. The switches are rated at 0.5 amps, which is fine for warning lights, or our interior light delay relay, but should have a relay for any heavier load.



**Micro Switch**

### Lever Arm Micro Switch



**Lever arm micro switch**

We have one switch, **PBE 0126**, with a long actuating arm and both normally open and normally closed contacts. Two small mounting holes are in the body. Applications are under handbrake levers for warning lamps, inhibitor switches on gearlevers, such as **B&M** or **Lokar** for starter circuits and boot lights plus lots more.

**Tech Tip;** When using screw terminals on electrical parts always solder wires together before connection. This will lessen the chances of the wire breaking or working loose.

## Switches 3

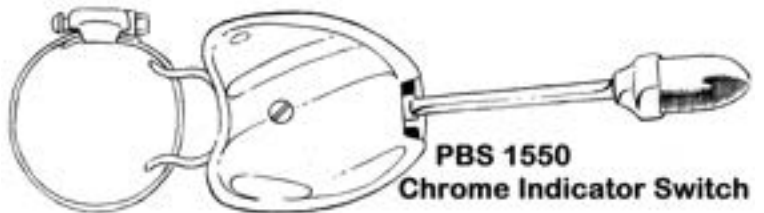
### Indicator Switches



We have four indicator switches in stock. The first, **PBS 1500**, is very like early indicator switches, with a two part body in black with an adjustable mounting clip and a chrome stem fitted with a black knob. Another version, **PBS 1500/G**, is identical apart from a

green flashing knob instead of the black one. The clip will suit a 42mm (1.625") but can be modified to suit a 45mm (1.75") using a flap wheel on the base.

Our second switch sourced in America, **PBS 1550**, has a chrome plated body and a green warning light on the stem. It has seven wires; not all are needed for the usual English amber indicators but can be connected up to flash one of the stop lamp bulbs at the rear of the vehicle as per American cars. A plated jubilee clip is used to mount the switch.



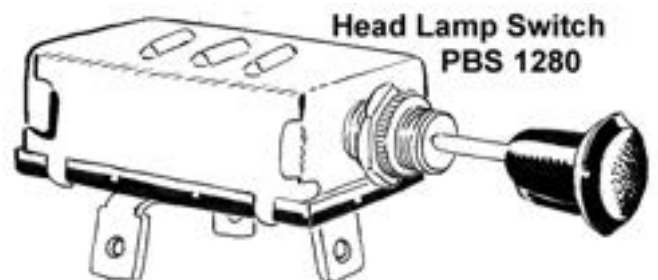
Our Rotary indicator switches look the part on a traditional dash, **PBG 1250**, has a black lever and **PBG 1250/G** has a translucent green knob which lights up when used.

Finally one of our Simple Switches, **PBS1101**, will also work if you are looking for an easy solution.



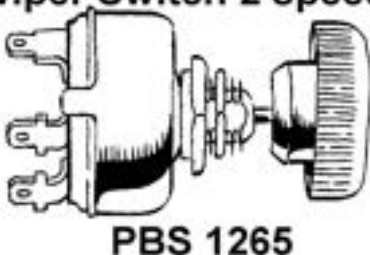
### Headlamp Switches

We have two pull type headlamp switches, they both have an off position, then side lamp and then headlamp. There is an extra terminal which is only on in the side light position for American front side lights which are not used with headlamps. The English version is **PBS 1260** and the American **PBS 1280**. They both have detachable Black plastic knobs of a different design which could be changed.

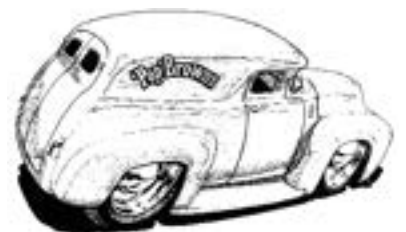


### Rotary Wiper Switch

#### Wiper Switch 2 speed



I looked for a switch, **PBS 1265**, like this for ages. The plastic knob is a little modern but could be changed. It works well with the round Lucas wiper motors as well as American systems and is set up for two speeds. Full wiring instructions are included.



**Tech Tip:** If you need two dash warning lights there are two easy ways to do it. Please phone for details.



## Switches 4

### Simple Switches

Our range of "Simple Switches" provides a range of basic switches covering most applications. They all have the "Policeman's trunion" style of lever, mostly in stainless steel. Very popular on Customs in the Fifties.

**PBS 1100** Off/On 25 amps, 12.5mm fitting hole.

**PBS 1101** Indicator switch, centre off

**PBS 1102** Side & Head lamp switch, 20 amps.

**PBS 1104** Hazard switch

**PBS 1105** Centre off momentary on, horn & wash? **PBS 1108** Change over switch, 2 circuits

**PBS 1109** Momentary on, H/L Flasher, washer, starter or horn

**Starter Switches** We stock three types of starter switch, though you could also use **PBS 1105**, one of our Simple Switches. **PBS 1107**, is an American switch and was the pattern used on Fords from 1937 to 1948. With a chrome finish it is designed to earth the starter solenoid through its body, originally via the metal dash board.

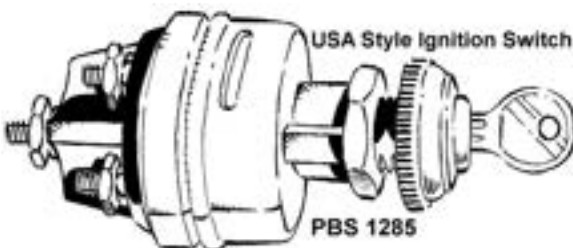
Our second button, **PBS 1110**, has a chrome body and a black button very like

the old Lucas unit fitted to Jaguars. There are two terminals on the back and it is a very robust switch.

The final version, **PBS 1111**, has a stainless steel hexagonal outer body and a nickel plated button. Again two terminals on the back make for easy connection.



### American Ignition Switch



We have replaced this switch, **PBS 1285**, with another design and brought the price down as well. There are four terminals, Bat = feed, Acc= for radios etc, Ing. = ignition & ST= the starter solenoid all 4.5mm [3/16"] studs with nuts. The accessory terminal can be switched on by turning the ignition key backwards; this leaves the ignition circuit disconnected. When the ignition is switched on, so

is the accessory circuit. Two keys are provided and the securing ring is made from knurled alloy, a thin backing nut is also supplied.

### Old Style Rotary Switches

This range of switches gives a vintage look to a dashboard. There are two indicator switches with a centre off. **PBS 1250** has a black knob and **PBS 1250/G** has a clear green knob, which illuminates in use. **PBS 1252** is a head lamp switch with 4 positions. All switches need a 27mm fitting hole and have screw terminals.

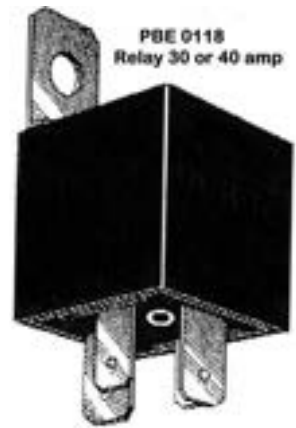


**Tech Tip:** A small amount of copper grease applied to terminal screws will improve conductivity and prevent seizure.

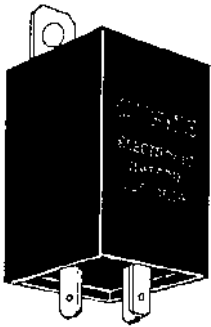
## Relays And Bases

### General Purpose

We stock a range of relays, all designed to act as electrical switches, allowing a heavy load to be controlled by a lighter switching circuit. For general use, **PBE 0118**, is rated up to 30 amps. Our heavy duty relay, **PBE 0118/40**, is ideal for use with headlamps, electric windows, starter switching loads & horns. Another useful relay is **PBE 0118/H**, which will control up to 70 amp circuits, such as a pair of small cooling fans or one large one. Fitted with larger blade terminals.



### Specialist Relays



The first of these is a fully electronic flasher unit, **PBE 0120**, with a capacity of 98watts. It's an ideal unit for a street rod indicator system, as it doubles as a hazard flasher, while tolerating broad variations of load, yet still maintaining a legal rate of 60 to 120 flashes per minute. **PBE 0120/C** is suitable for towing, as it has the extra terminal necessary for the required trailer warning lamp. Another useful unit, **PBE 0161**, can be used to replace a dipswitch. The relay alternates between the high & low beams of your headlamps at the touch of a button. It is also useful in restorations, as it removes the load from old switchgear;

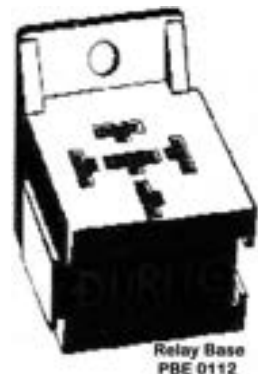
however, it does have a maximum load capacity of 150 watts per beam. We also stock a fuel pump relay, **PBE 0138**, which though designed for fuel injection systems, will work with any heavy duty electric fuel pump & can be used in conjunction with an oil pressure safety switch, as fitted to the Rover SD1 & some American engines. This system works by cutting the current to the pump if oil pressure disappears.

<b>PBE 0118</b>	30 amp relay	<b>PBE 0118/40</b>	40 amp relay
<b>PBE 0120</b>	Hazard/Flasher unit, 98 watts.	<b>PBE 0120/C</b>	Hazard/Flasher 4 terminal.
<b>PBE 0138</b>	Fuel pump relay	<b>PBE 0118/70</b>	70 amp Fan etc

### Relay Bases



We stock three types of pre-wired relay bases, & strongly recommend their use, as they allow relays to be removed without risk of incorrect connection on replacement. The first version, **PBE 0112**, can be interlocked to form banks & has a built in mounting lug. The second version, **PBE 0112/1**, is a free-standing unit for relays with their own mounting lugs. A third version, **PBE 0112/H**, suits our heavy duty relay. All three versions are supplied with terminals and will work with nearly all of our relays.



<b>PBE 0112</b>	Stackable relay base, for our 30 and 40 amp relays.
<b>PBE 0112/1</b>	Free-standing relay base for our 30 & 40 amp relays .
<b>PBE 0112/H</b>	70 amp large terminal base

### "Lights On" Buzzer

Sheer luxury, but who can resist a gimmick. This buzzer can be used to warn you that your lights have been left on. With the addition of diodes, it can also be used on other circuits. Two tone 72 decibel warning sound.

Part No. **PBE 0155** "Lights On" buzzer

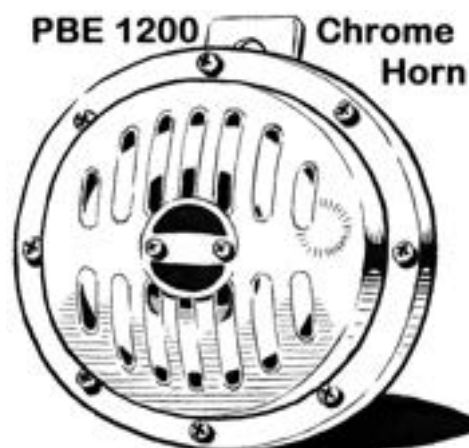


**Tech Tip;** A dab of Vaseline or Copper grease on the base of a bulb will improve the conductivity & prevent corrosion allowing easy removal when the time comes to change the bulb.

## Electrical Horns

### Chrome Horn

This horn, **PBE 1200**, has a satin chrome slotted cover. The horn is 12 volt and the tone adjustable via a sealed hole in the back. The diameter is 95-mm and the depth is 45-mm and is of sturdy construction. A pair of blade terminals provides electrical connection, and a mounting tag is included. Use our 30 amp relay, **PBE 0118**, for maximum performance.



### Economy Horns

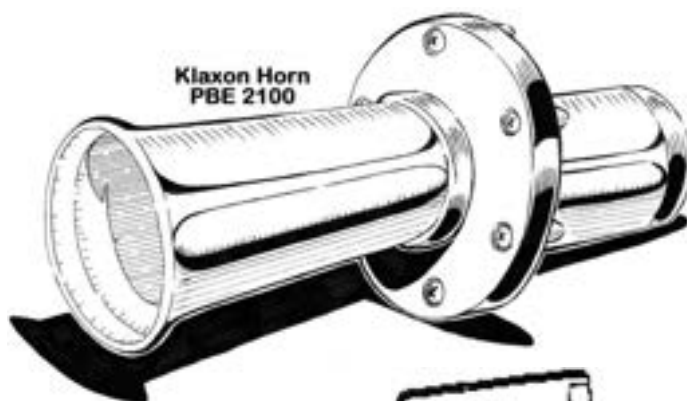
These disc horns, **PBE 0189**, can be used separately or in pairs. There is a high tone version, **PBE 0189/H**, or a low tone, **PBE 0189/L**. They have two spade type terminals, making electrical connection a snap and making a good earth easy. A pair can be operated through our relay, **PBE 0118/40**.



**PBE 0189 Economy Horn**

### Klaxon Horn

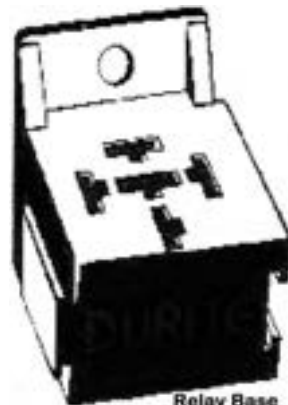
Our Klaxon horn, **PBE 2100** has a chrome trumpet and motor cover. Designed for 12 volts, 3 amp systems with a very distinctive, loud 110 disabled sound Klaxons have been popular since their introduction at the dawn of the motor car. The length is 220mm and maximum diameter 110mm with two polarity conscious male blade terminals. One of our relays, **PBE 0118** would be ideal in this situation as it has quite a high current draw.



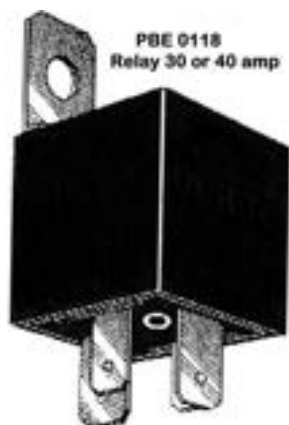
**Klaxon Horn  
PBE 2100**

### Relays and Bases

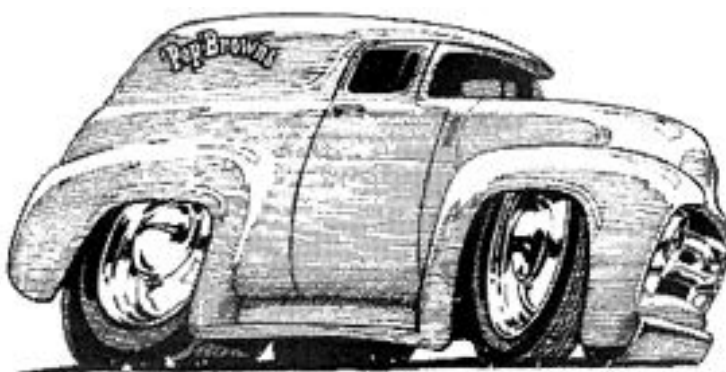
Either one of our **PBE 0118**, a 30 amp relay or **PBE 0118/40** a 40 amp version would work with the horns. Use our base, **PBE 0112** or **PBE 0112/1** as a pre-wired socket. The former is stackable if you need to add extra circuits. Bases come complete with terminals.



**Relay Base  
PBE 0112**



**PBE 0118  
Relay 30 or 40 amp**



**Relay Base  
PBE 0112-1**

**Tech Tip:** Horns work best through relays, they are often louder & the switch is not subjected to the higher amperage ensuring a longer life.

## Dashboard Warning Lamps

These lamps are more traditional than our LED range, having a large 16mm head fitted with a bright stainless steel rim. A moulded plastic body fits into a 12.7mm hole & has a push-in metal bulb holder with two 6.4mm spade type male connectors, which can be used with the female terminal & cover listed below. A 12 volt 2 watt peanut bulb is fitted & the lamp measures 48mm overall. The following colours are stocked, red, used for ignition, green for indicators, and yellow (amber) for oil and miscellaneous & blue for headlamp main beam.

<b>PBE 0109/R</b>	Red w/lamp
<b>PBE 0109/G</b>	Green w/lamp
<b>PBE 0109/Y</b>	Amber w/lamp
<b>PBE 0109/B</b>	Blue w/lamp
<b>PBE 0109/T</b>	Spade terminal & cover
<b>PBE 0109/L</b>	Spare bulb



### L.E.D. Warning Lights



A really bright answer to the warning lamp problem, they look equally at home in a modern high tech dash or your early engine-turned panel. Available in two basic styles & two finishes, there is a type to suit all tastes. The first type has a hooded surround & can be used as is, or sunk into an alloy panel & the second is more prominent with a rounded early look. Lamps are available in Chrome. Flashing versions are stocked in certain colours, ideal for important warning lights such as brake fluid indicators.

They all fit our dash panels **PBH 1010 & 1020**. **Note They are polarity sensitive with the brass terminal = positive & the silver = negative.** Colours are Red, often used for ignition, Blue for main beam, Green for indicators & Yellow for oil. Please add **/B** to part number and colour code for a black chrome finish and **/F** for a flashing version e.g. a red hooded black chrome flashing would be **PBE 0105/R/B/F**. Terminals are available for easy connection or you can carefully solder your wires on, they fit an 8mm or 5/16" hole and are secured by a hexagonal nut.

<b>PBE 0106</b>	Hooded Warning Light
<b>PBE 0107</b>	Prominent Warning Light
<b>PBE 0165</b>	2.8-mm Terminal, two per lamp
<b>PBE 0107/S</b>	Insulating sleeve



#### **Lamp Colours:**

**Red = R    Green = G    Blue = B    Yellow = Y    Black Chrome = B    Flashing = F**

### Warning Light Sleeve

Ideal for insulating the back of the above warning lights, especially in an open car where there is always a risk of rain getting down the back of the dashboard.

### Leads

We now stock colour coded leads complete with terminals already fitted. Red for positive (Brass) and Black for negative (silver), sold in pairs, **PBE 0107/C**. Diodes, **PBE 0107/D**, are available if you wish to use one lamp controlled by two circuits, such as an indicator warning light. A resistor, **PBE 0107/O** is also available if you are having trouble with a weak glowing ignition light or "running on". Please phone if you need help with these parts. **0844 544 0960**



**PBE 0107/S Sleeve**

*Tech Tip:* Why not use a red flashing indicator lamp for your hand-brake and low fuel warning light.



## Electrical Odds & Ends

### Power Point

These power points **PBE 0017** are becoming increasingly useful with most people using satellite navigation, lead and map lamps as well as I-Pods. It will also recharge your battery starter pack or charge your battery. If you take the feed from a permanently “live” source rather than an ignition controlled one the socket can be used at any time. Don’t forget to fuse the feed and ensure a good earth to prevent future problems. Drill a 26 mm diameter hole to fit the socket and use the provided moulded nut to secure the unit. Finally a dust proof cap seals the unit when not in use. A good idea for vehicles with solenoid door locks if hidden externally. A version with an illuminating bulb for the retaining ring is available to special order.



### Buzzer

This noisy little buzzer **PBE 0155** measures 40-mm (L) x 27-mm (W) x 16-mm (H) and has a pair of 2.5-mm holes on 32-mm centres. It could also be mounted using double sided sticky pads. Colour coded leads are supplied. Would work on indicator systems, also for “lights on” relays or any circuit needing a warning noise. I have one on the indicators of my F-100 panel truck.

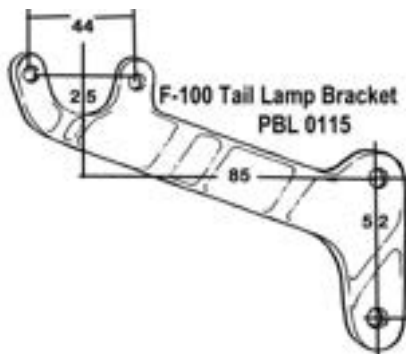
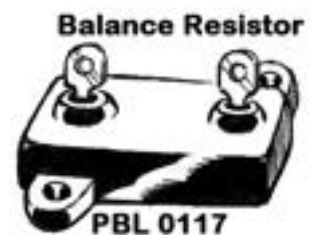


### Ford Starter Solenoid

This heavy duty starter solenoid **PBE 0128** was use from 1956. It is usually firewall mounted. They remove the load on the starter switch and allow the use of shorter main battery cables. In the late Fifties and Sixties they were used as door openers as they are quite powerful and fairly cheap. They are complete with all nuts for the terminals. See page on **Switches 1** for suitable starter switches.

### Balance Resistors

Are you using side marker lamps for your indicators? If so your flashers are probably flashing too fast. This is because the reduced wattage of the bulbs means that there is less load on the indicator relay. The old round aluminium relays are especially susceptible. A simple trick is to add two of our resistors **PBL 0117** in parallel with the existing lamps. There are 2 terminals on top of the resistors allowing an earth lead on one side and the other to the left or right hand indicator circuit. Do not mount them on any inflammable surface as they produce heat. They are sold in pairs.



### Tail Lamp Bracket

Produced in polished stainless steel these brackets **PBL 0115** are used on Ford F-100 pickups. They will fit Chevrolet pickups with a slight modification to one mounting hole. Early Ford pickups use them though they would suit many other vehicles.

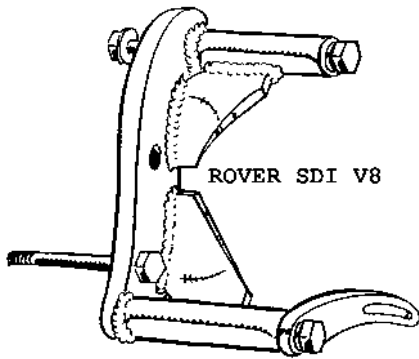


**Tec Tip;** I always start a file with a new project. I make up an XL file on my computer. I list the parts used, with part number & source. Vital when you are replacing a worn wheel bearing three years down the road.



## Alternator Brackets

### Rover V8



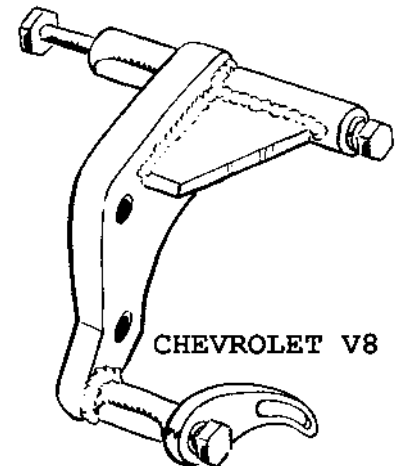
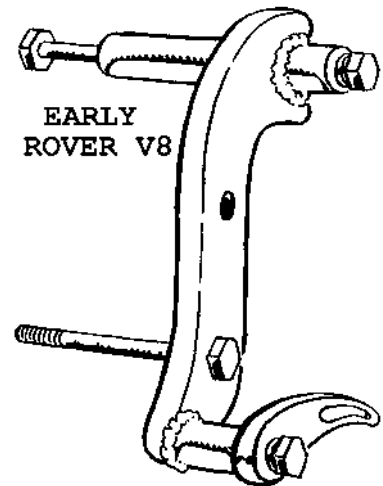
Our kits for the Rover V8 place the alternator low down on the left-hand side of the engine by the sump. The kit uses two lugs already on the timing cover, including one existing 3/8" bolt plus an extra 5/16" bolt supplied with the early kit. An extended version has been added to move the alternator away from the block, when

space will allow, to make more room for larger units. It is ideal on 34's & later vehicles.

### Chevrolet V8

Again, our kit places the alternator down on the left hand of the block, level with the crankshaft pulley. The bracket bolts onto the two block bosses, which were used for engine mounts on the 1956 engine. Due to two different water pump lengths and various pulley depths, please let us know the distance between the centre of your lower pulley and the mounting bosses.

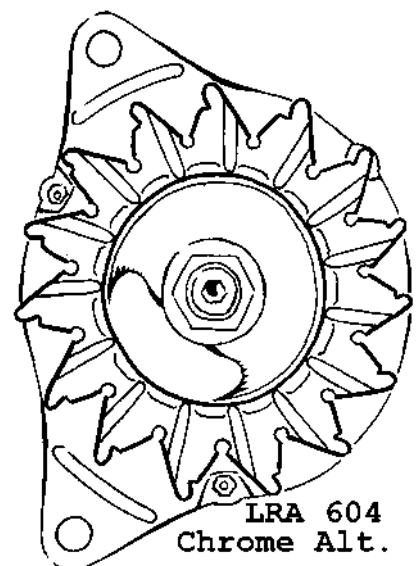
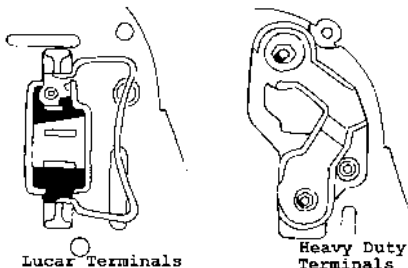
All our kits use Lucas alternators, such as the 17, 18 or 19 ACR or the preferred heavy duty, LRA 604, we can supply Chrome and standard alternators, as well as loom plugs to suit. Special fan belt lengths are required, which we have in stock.



- PBA 0300** Early Rover V8 kit
- PBA 0300/E** Early Rover Extended V8 kit
- PBA 0302** Chevrolet S/B V8 kit
- PBA 0311** SDI Rover fan belt.
- PBE 0123** ACR Alternator loom plug kit.

- PBA 0301** Rover SDI kit
- PBA 0301/E** Extended SDI kit
- PBA 0310** Early Rover fan belt
- PBA 0312** Chevrolet fan belt

Lucas or Bosch alternators are popular. Lucas units have two types of terminals, the lower 55 amp units use the "Lucas" (spade) connectors and need our **PBE 0123** loom plug kit. The higher output 65-amp version has a pair of studs for ring terminals. Any Lucas alternator is handed, that is the lugs are arranged to favour one side with the adjusting strap lug, see the drawing opposite. This can be reversed by carefully withdrawing the three long studs, which bolt the two halves together. **THERE IS NO NEED TO SEPARATE THEM.** The halves can then be rotated 60° and bolted back together.

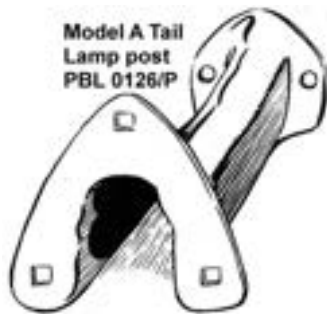


**Tech Tip:** To correctly adjust your fan belt, the usual way is to have about 12mm [1/2"] movement, from the centre line, in the longest run of the belt

## Tail Lamps

### Model A Tail Lamp

Used on Model "A" Fords this tail lamp can be used on all sorts of other vehicles including Model Y's, Mullins & Teardrop trailers, plus early sports car replicas. A tail lamp stand is available in two versions, plain & chrome. The lamp has a



choice of lens, all red or ampere top and red bottom - both can be fitted with Blue Dots. We can supply replacement bulb holders which allows the fitting of a stop and tail lamp bulb (UK spec) behind the lower portion of the lens, allowing the lamps use on later vehicles. A lamp with a clear glass window is available if you wish to illuminate a number plate as per the original vehicle. The lamp measures 96-mm in

diameter plus 60-mm deep with a glass lens, polished stainless steel body and rim.



**PBL 0126/R**  
**PBL 0126/A**  
**PBL 0126/AN**  
**PBL 0126/PB**  
**PBL 0126/PC**  
**PBL 0126/**  
**PBL 0126/X**  
**PBL 0126/Z**  
**PBL 0126/P**

Model A tail lamp with red lens.  
Model A lamp with Ampere & Red lens (UK spec).  
Model A lamp as above, + number plate window.  
Tail lamp post, black. Sold in pairs.  
Tail lamp post, chrome. Sold in pairs.  
Three stainless steel bolts for the tail lamp post.  
Pickup tail lamp brackets, pair used from 1928 to 37.  
Rear lamp cover, polished stainless steel.  
Rubber pad fits between the post & the body.



### Model A Tail Lamps LED

The use of LED lenses in Model A tail lamps improve their performance immensely, being a great improvement. The other benefit is that LED's consume far less power than normal bulbs and to that end we stock special indicator flasher units that are not load sensitive.

**PBL 0130/LL1** Model A LED Red/Amber spare lens UK spec  
**PBL 0130/LL2** Model A LED Red/Amber + window lens UK spec  
**PBL 0130/LL3** Model A LED All Red replacement lens  
**PCL 0130/LL4** Model A LED All Red + window for number plate  
**PBL 0130/LED1** Model A LED Red/Amber st/st tail lamp UK spec  
**PBL 0130/LED2** Model A LED Red/Amber + no plate lamp UK spec  
**PBL 0130/LED3** Model A LED RED R hand tail lamp UK spec  
**PBL 0130/LED4** Model A LED Red L H tail lamp + no plate UK spec



***We can convert all red lamps to UK spec, i.e Stop/Tail & Indicator. See price list for full range***

*Tech Tip:* A small amount of lubricant such as "Copper slip", Silicon or even normal grease will prevent your tail lamp bulbs seizing in the holder & maintain a good earth contact.

## Tail Lamps 2

### 1939 Teardrop Lamps



The 1939 Ford Teardrop lamp is instantly recognisable and has been popular for many years. The standard lamp **PBL 0107** has an all red glass lenses, is fitted with a single stop and tail lamp bulb. If you are not running a separate indicator lamp and your vehicle was registered before the mid sixties, a relay kit **PBL 0109** or our indicator switch **PBS 1550** can be used to interrupt the stop lamp circuit to allow the bulb to double up and act as an indicator. We also stock an Amber lens **PBL 0107/LA** to change the lamp into an indicator. Rubber pads **PBL 0107/P** should be fitted under the lamp to protect the wing as well as reducing the ingress of water.

A recent development is the use of LED lens with printed circuits behind them.

This provides a flat back for the unit no deeper than the rim allowing the lamp to be fitted to flat surfaces, just requiring two small fixing bolts and a hole for the wiring. The lamps produce a very clear, bright light which lasts much longer than conventional bulbs. The other main advantage is that much less current is required. Another version has a separate amber section wired up to act as an indicator with the stop and tail light. It is shown with the optional Zephyr chrome rim with its distinctive cross bar separating the two sections.



**PBL 0107**

39 Teardrop

with red glass lenses.

**PBL 0107/L**

Spare Red lens for above.

**PBL 0107/LA**

Spare Amber lens for above.

**PBL 0107/LED**

39 Teardrop lamp red LED lens.

**PBL 0107/ C02**

39 Teardrop flat back Red LED lamp + Chrome rim.

**PBL 0107/LED2**

39 Teardrop flat back Amber/Red LED lamp.

**PBL 0107/B1**

39 Teardrop chrome lamp rim, used to secure lamp.

**PBL 0107/B3**

39 Teardrop chrome Baby Zephyr lamp rim, secures lamp.

**PBL 0107/P**

39 Teardrop rubber pad, original style.

**PBL 0107/PF**

39 Teardrop rubber pad for flat back light.

**PBL 0107/F**

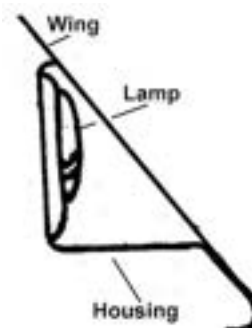
39 Teardrop Frenching housing, GRP, for

fibreglass wings.

**PBL 0107/H**

39 Teardrop Frenching housing, steel.

We have two systems for inserting the 39 tail lamps tail your rear wings or body. This style, using a separate call "Frenching" and is designed to fit the lamp into the than on top of it. Setting the housing in on an angle the visibility of the lamp and is a special advantage with lamps as they are at their best at 80° to 90° angle to the Note; Most indicator relays cannot "see" LED lamps due resistance, this leads to very fast flashing. There are two



lamps into housing, is panel rather increases the LED road. to their low solutions,



either increasing the resistance of the lamps using our resistors **PBL 0117** or a better way is to use our flasher relay **PBE 0120/LX** (3 Terminals) or **PBE 0120/L** (2 Terminals) which is not load sensitive and can handle different combinations of lamps such as side markers or the addition of trailers.

**Tech Tip:** Always use a pre-wired base if you can, it simplifies wiring and makes it easy to check or change units.

## Tail Lamps 3

### Indicators

This rectangular indicator **PBL 0108** has a neat chrome plated body with an amber fluted lens. As a self contained indicator they look good under bumpers and wings.



**PBL 0108**

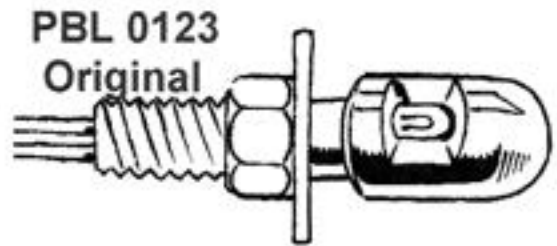


**PBL 0127 HD Indicator**

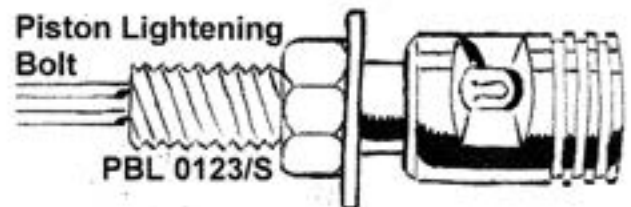
These indicators **PBL 0127** are patterned on Harley Davidson motor cycles. They have a chrome body with an Amber conical lens. Again they are self contained, looking good on bumpers. Sold in pairs.

### Lightening Bolts

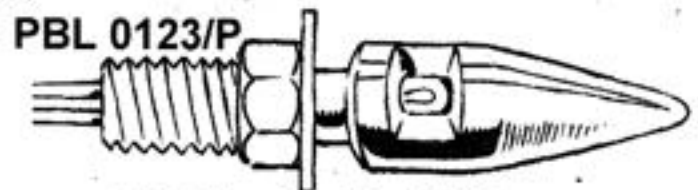
Our lightening bolts are designed to do two jobs; they illuminate your number plate as well as securing it to the vehicle. They are fitted with a small "grain of wheat" light bulb, using only



**PBL 0123  
Original**



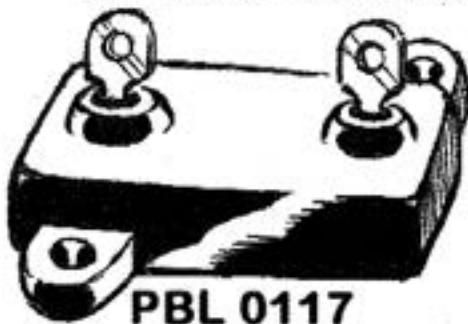
**Piston Lightening  
Bolt  
PBL 0123/S**



**Lightening Bolt Pike**

about 50 Millie amps and have a polished stainless steel body and lock nut. An 8-mm (5/16") mounting hole is needed for the threaded stem. Two tiny wires are used to connect the lamp up. We strongly recommend a piece of heat shrink tubing is used to support and protect the wiring. Three styles are stocked, **PBL 0123** the original pattern, **PBL 0123/S** a piston shaped version and **PBL 0123/P** the design being a pike bolt style. All are sold in pairs.

### Balance Resistor



**PBL 0117**

### Balance Resistors

Are you using side marker lamps and finding that your flasher unit is flashing too fast? These balance resistors **PBL 0117** will adjust the rate. Sold in pairs they are wired in parallel to the lamps. They can be fitted under the dash but

produce heat so bear that in mind when sighting them. You will need one resistor per low wattage bulb.

### Blue Dots

This Thirties safety item **PBL 0116** was intended to draw your eye to the low powered brake lamps of the period. Sold in pairs they should be sealed into your lens with silicon sealer as water proofing.



**PBL 0116  
Blue Dot**

**Tech Tip:** If you are fitting "Blue Dots" try to arrange the dot to line up with the stop lamp for maximum effect.



## Lamps and Brackets 4

### Headlamp Conduit

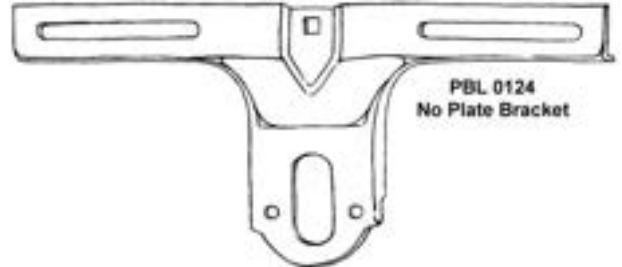


Made from stainless steel, these conduits **PBL 0260** are a neat way for getting cables from the car to the lamp. They are 315mm (12.5") long with plenty of room for 4 to 5 wires.

One end has a cap with dimples which originally engaged with two curved slots in the base of the headlamp and the other has a finishing thimble. They work well on both headlamps and tail lamps.

### Number Plate Bracket

Made from stainless steel this number plate holder **PBL 0124** will fit Ford car tail lamps from 1928 to 1936 and Pickups into the Fifties. With a slight filling of the two mounting holes it will accept some Chevrolet tail lamps. The bracket is 280-mm wide, 130-mm high, with 7-mm mounting holes on 45-mm centres.



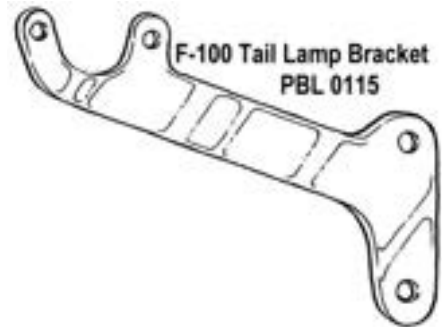
### Pickup Tail Lamp Bracket

Used on Model A Pickups, this bracket **PBL 0126/X** will fit most Ford pickups into the Sixties. Finished in black it will accept Ford tail lamps from 1928 to

1936.

### F-100 Tail Lamp Bracket

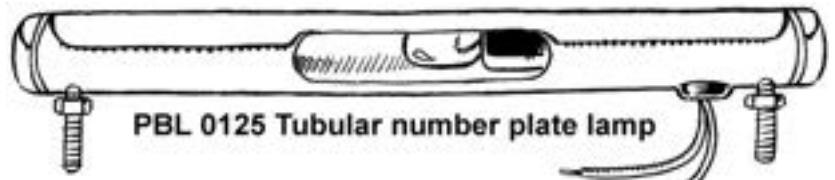
The bracket **PBL 0115** is used on Ford F-100 pickups but will fit lots of pickups. With a small mod they will fit the Fifties Chevrolet pickups. Made in stainless steel the lamp holes are 7.5-mm diameter on 44.5-mm centres, the body bracket holes are 7-mm holes with 51-mm centres. The centre of the lamp is 108-mm from the body mounts



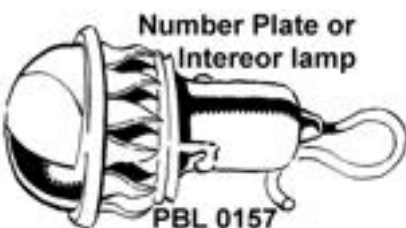
### LED Number Plate Lamp



This little LED number plate lamp **PBL 0111** has a polished stainless steel removable cover. There are two 3.5-mm fixing holes on 50-mm centres with fixing screws included. Three bright LED provide good illumination. The lamp can be used as an interior lamp by leaving the cover off.



### Tube Number Plate Lamps



This design **PBL 0125/L** is very old and goes back to the Customs of the Fifties. This version has been improved using LED bulbs to increase illumination and reduce power consumption. The lamp measures 208-mm long and 22-mm in diameter.

The final number plate lamp **PBL 0157** is designed to snap into a 32-mm hole. A frosted glass lens is surrounded by a chrome body.



## Head Lamp Units

### 7" head lamp unit



Our 7" head lamp unit, **PBL 0105**, is very popular as it fits most of the free standing head lamps such as Ditz, King Bee's and most vehicles from 1950, until the rectangular head lamps came in during the seventies. Equipped with an H4 Halogen 60-55watt headlamp bulb and a built in side lamp. We stock a high performance H4 bulb, **PBL 0136/H**, with 100/80 watt power. We can add an indicator bulb by fitting an extra snap in bulb holder, **PBL 1530**, and using either a special, small headed amber bulb, **PBL 1530/**, or an amber LED version, **PBL 1530/I**.

### 5.75" head lamp unit

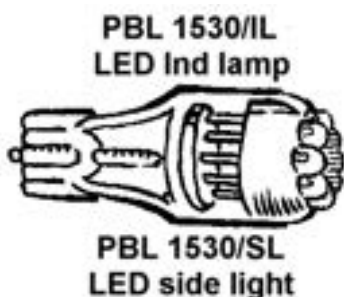
Used in our **PBL 0100** head lamp shells the lamps, **PBL 0102**, are similar in all other details to the 7" units above. Side lights are included and indicator lamps can be added. I have used them in Vauxhall Coupes, Ford Capri's and Humber's as well as most twin headlamp systems.



### 7" Head lamps with LED indicators



This American **PBL 0105/IL** uses the normal H4 fitting for an English bulb. Its main attraction is a double row of amber LED lights at the bottom of the lens. The bright row is used in the States as an Indicator, and the dimmer row used as side lights. I suggest that you use both as an indicator, as the Police will probably object to an amber side light. We can add a side light feature using the snap in bulb holder, **PBL 1530**, with either the normal bulb, **PBL 1530/S**, or a neat white LED bulb, **PBL 1530/SL**.



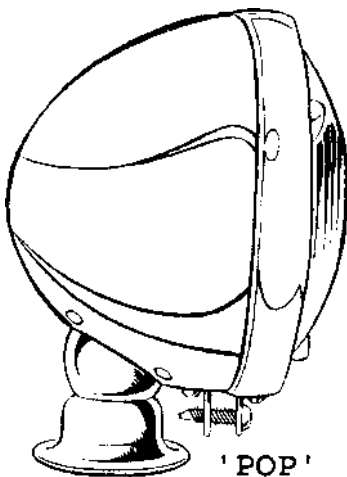
**PBL 1530** Snap in bulb holder  
**PBL 1530/IL** LED Amber cap-less bulb  
**PBL 1530/S** 5 amp cap-less side light

**PBL 1530/I** Amber cap-less 23 watt bulb  
**PBL1530/SL** LED clear cap-less side lamp

**Tech Tip:** A smear of silicon grease on the base of the bulb will help stop it sticking on removal.

## Headlamps

### POP' Headlamps



5 3/4" Headlamp units, **PBL 0100**, complete with Halogen main and dip beam bulbs, plus a separate side lamp bulb. Available in all black, black with a stainless steel rim, or all stainless steel, bases are included. H4 Halogen headlamp bulbs are used and a side light is fitted. They would suit any Rod wanting a neat self-contained headlamp unit. We stock H4 Halogen 100/80 watt high powered replacement bulbs if you would like to upgrade from the standard 60/55 watt. Available with built in indicator lamps to special order, just add /I to the part number.

**PBL 0100/B** Complete lamp, black with chrome rim

**PBL 0100/C** Complete lamp in chrome

**PBL 0100/E** Black economy lamp with sealed beam

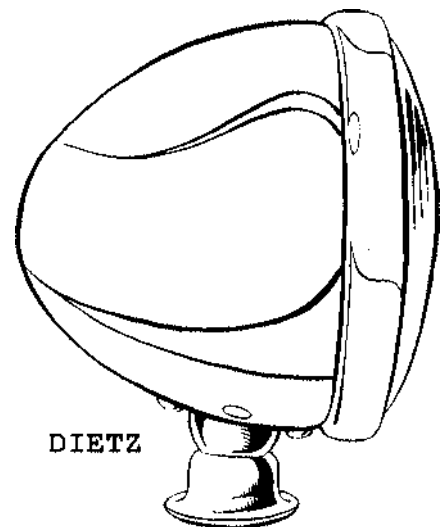
**PBL 0136/H** H4 Headlamp bulb 100/80 watts

### Dietz Headlamps

Using a modern 7" light unit, this style of headlamp has been used on many famous cars, especially 34 Fords. Chrome plated, it adds a modern look to your Rod and is especially suitable for that "High-Tech" look, available with side light provision.

**PBL 0103** A pair of chrome headlamp shells

**PBL 0105** 7" Halogen conversion including sidelights



### King Bee Headlamps

This 7" lamp has been in use on Hot Rods since the Fifties and is the way to go for Nostalgia cars. Chrome plated with a pleasantly rounded shape.

**PBL 0106** Headlamp and sealed beam unit

**PBL 0105** 7" Halogen conversion inc. sidelights



*Note: We can supply both the King Bee and Dietz units in polished stainless steel to special order*

### Head light units

We stock both 5.75" **PBL 0102** and 7" light units **PBL 0105**.

All use Halogen H4 head lamp bulbs and a choice of side light bulbs; in most cases we can add indicators & side lights as necessary.

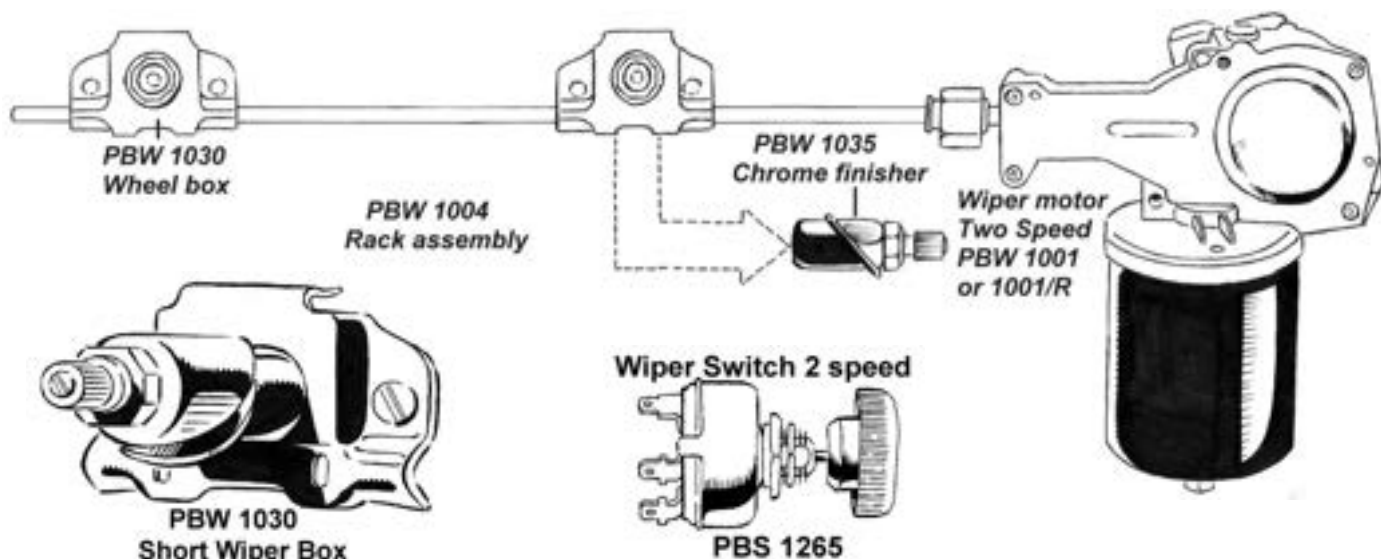
Loom Plugs

LED side light bulbs



**Tech Tip:** Headlamps Can be adjusted using a garage door provided the floor is level. Just mark two crosses on the door at the height of the centre of the lamp & the same width apart.

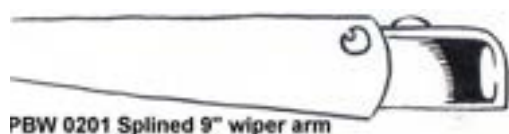
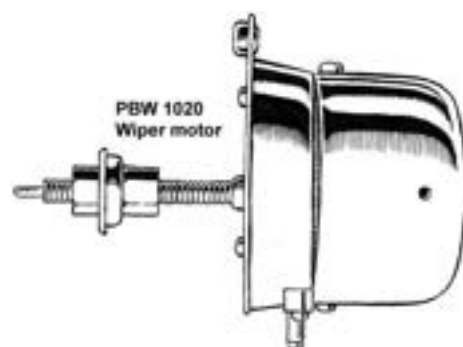
## Wiper Parts



We can build a system to suit your vehicle. Just measure accurately between the centre points of the two existing wiper holes. Having worked out where the motor is to be mounted, measure to the centre point of the nearest wheel box. If you need a "Clap hands" system where the wiper blades come together in the middle of the screen, such as a lot of early American cars have, just invert one of the wheel boxes. Top mounted wipers work well, but you will need to be able to thread the rack up through the wind screen pillar. All parts can be supplied separately.

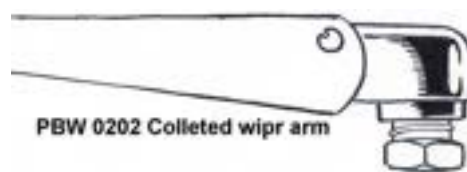
Our wheel boxes, **PBW 1030**, have splined output spindles and chrome finishers. The motor we use is a two speed Lucas unit, there is a choice of new or rebuilt. Various gears are available to change the arc of the blades. A self parking feature is built in and a plastic moulding with terminals, **PBW 1003**, is the simplest way to connect the power. The rotary two speed wiper switch, **PBS 1265**, comes complete with a colour coded wiring diagram. The black knob is removable and could be changed for one of your choosing if preferred.

The single wiper motor, **PBW 1020**, has a polished stainless steel shell and an output shaft which it is possible to trim to suit your application. A self parking circuit is included and the wiring is unusual, as the switch is in one of the two earth wires. A chrome wiper arm and blade is included. Our wiper arm, **PBW 0202**, and blade, **PBW 0200**, can be used as spares. Another motor, **PBW 1020/B**, is finished in black and



**PBW 0201 Splined 9" wiper arm**

has a built in On/Off switch with a simple two wire hook up. It looks very similar to



**PBW 0202 Colleted wiper arm**

We stock two wiper arms; one, **PBW 0201**, has a splined socket with a retaining screw. The other arm, **PBW 0202**, uses a colleted head for a 1/4" shaft. Both use a rubber peg which doubles as a parking stop to prevent marking your paint job. Each blade is supplied with a peg. Two blade sizes are available, a nine inch, **PBW 0200**, and a ten inch, **PBW 0200/10**, both can be trimmed if necessary.

**Wiper Blade 9" PBW 0200** **Blade 10" PBW 0200/10**

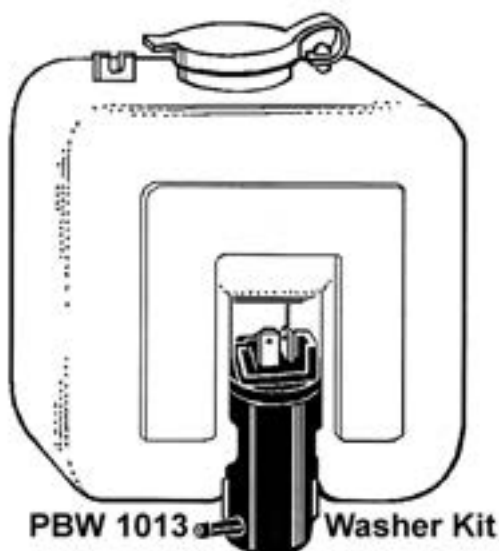


**Tech Tip:** Cut arcs of cardboard to help site the positions for your wheel boxes. Use the height of your windscreen for the maximum arc.

## Washer Parts & Battery Spares

### Windscreen Washer Kit

This kit **PBW 1013** is a good compromise between capacity and size. It measures 120-mm wide 180-mm tall and 90-mm deep. The motor snaps into a socket in the reservoir. Clear plastic tube and windscreen jets are included also a quantity of wire and a switch. A mounting bracket clips onto the back of the bottle.

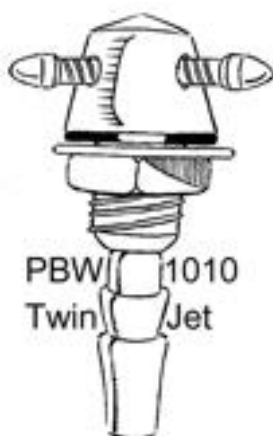


### Washer Jets

We stock three types of windscreen washer jet. The first is a chrome plated single jet **PBW 1011** and the



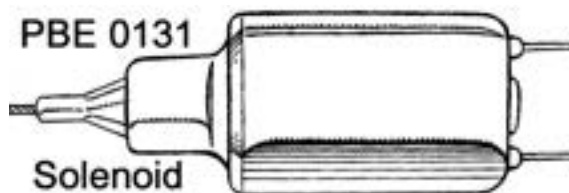
second is a twin version **PBW 1010**, both are sourced in the UK. The third type **PBW 1012** comes from the USA and suits larger vehicles. I have a pair on the F-100. Again they are chrome plated.



### Solenoid

The solenoid **PBE 0130** comes with a mounting bracket, wiring, push switch and connectors. It works well on boot lids and doors. There are two electrical terminals and a steel Bowden cable for

attachment to your latch system. A relay such as our PBE 0118, 30 amp allows all sort of switching, even remote controls.



### Battery Spares

Our battery master switch **PBE 0121** is the simplest way to disconnect your battery. The switch has a removable actuating red plastic key and has two 8.5-mm fixing holes. There are two 10mm studs for the battery leads. The switch can be mounted using our bracket **PBE 0121/B** which has two 8.5mm holes on 42-mm centres as well as another pair of holes at 42 mm holes to suit other switches. We stock suitable terminals for our master switch as well as battery connectors, PBE 0140 is the positive version and PBE 0141 fits the negative terminal. We also stock insulating terminal covers in Red & Black as well as made up cables with positive and negative terminals all ready in place.



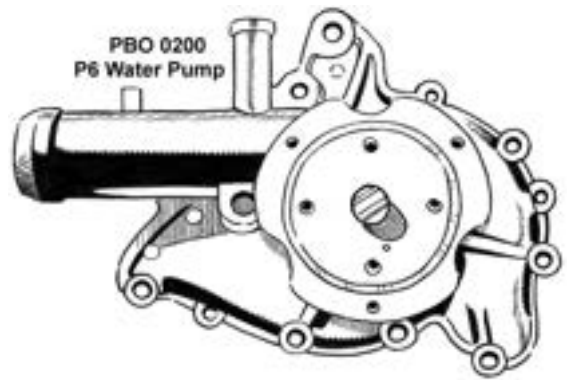
**Tech Tip:** When setting up windscreen washers aim the jet at the centre line of the wiper blade arc about 25-mm (1") from the top of the arc.



## Cooling System Parts

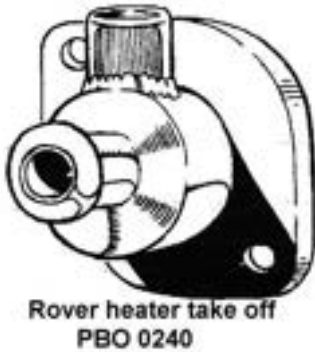
### Rover P6 Water Pump

This alloy water pump, **PBO 0200**, was fitted to early Rover engines prior to the introduction of the SD1 unit. You can fit one to the SD1 engine but as it reduces the length of the power unit by 2" (50.8-mm) you will need a set of early pulleys. A gasket is supplied and we sell spare gaskets, part number **PBO 0250/G**.



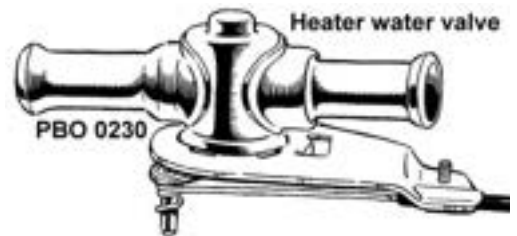
### Rover Heater Take Off

This "take off", **PBO 0250**, bolts on to the rear of the Rover V8 inlet manifold. A 14-mm boss is designed to accept our electric radiator fan switch, **PBE 0124**, and a stem for your heater hose. A gasket and stainless steel bolts are included. We also make a polished stainless steel version, **PBE 0124/S**. Replacement gaskets, **PBO 0250/G**, are also available.



### Heater Water Control Valve

This valve, **PBO 0230**, allows you to switch your heater water supply on and off remotely. The control cable is 34" (860-mm) long fitted with a black knob complete with symbol and chrome threaded finisher for panel mounting. The hose stems are 5/8" (16-mm) diameter.



### Radiator Caps



All our radiator caps are the short style and have different pressures, 10 lbs, 13 lbs and 15 lbs. A chrome hexagonal cap, **PBO 0006**, chrome round cap and **PBO 0007** & polished stainless steel **PBO 0005** are stocked.

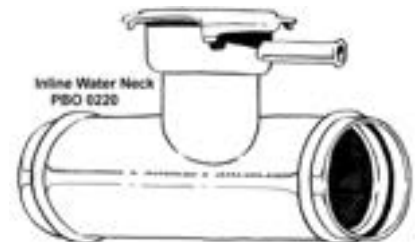
### Radiator Filler Neck

This brass filler neck, **PBO 0225**, is high quality and ideal for custom radiators, in line fillers and overflow tanks. It uses the standard 20-mm (3/4") "Short" neck for most popular pressure caps and has a 5/16" (8-mm) overflow stem as well as a 30-mm base spigot. I like to use silver solder to join them to the radiator but normal solder will be fine.



### In Line Filler Neck

One solution when using a low mounted or cross-flow radiator is to fit an inline water neck such as our **PBO 0220**. Our standard unit uses 38-mm (1.5") mild steel hose 100-mm long but other sizes can be ordered.



### Hose Coupler



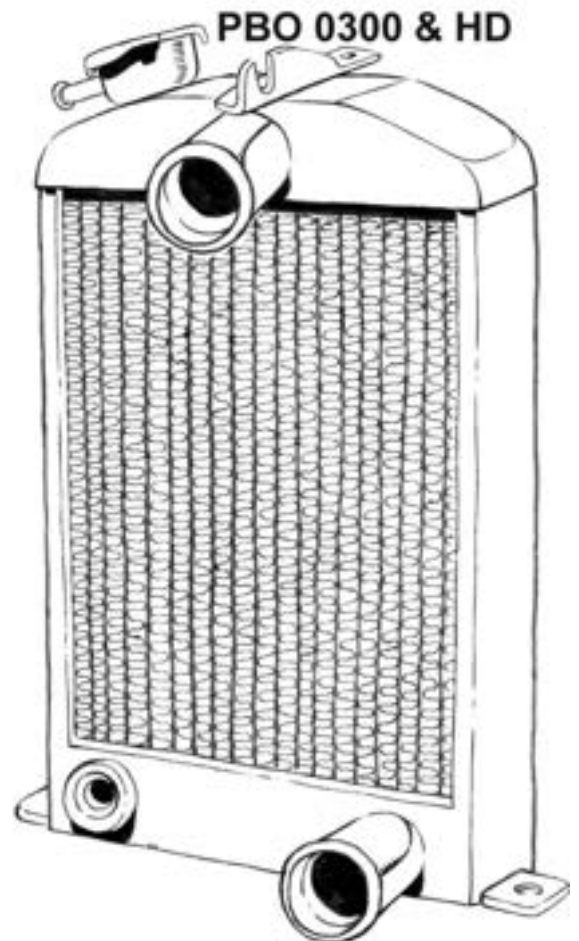
We now have a neat little machine which is capable of raising a ridge on tubing to prevent a hose sliding off. We can produce hose couplers in mild or stainless steel tube or can raise a ridge on your connectors or hose elbows, please phone us on **0844 544 0960**.

***Don't be tempted to run your motor without a thermostat. Apart from controlling the running temperature and therefore the motors efficiency, it acts as a restrictor. This in turn forces the water to circulate round the rear of the engine block.***

## Alloy Radiators and Related parts

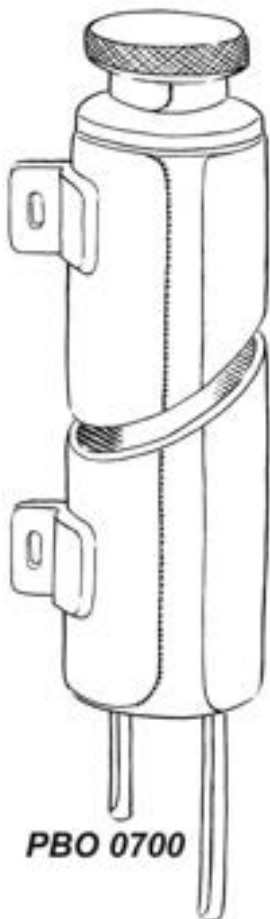
### Alloy Radiator for Anglia's, Poplar's, & Prefect's

Our alloy radiator comes in three-core thickness - the one in the picture shows the thinnest version, **PBO 0300**, which suits Rovers & smaller engines. The heavy-duty version, **PBO 0300/HD**, suits small block American V8's with a thicker core and a special order version, **PBO 0300/XHD**, has an even thicker core for big block V8's. All versions have a 22-mm fan switch boss built into the lower tank. The standard Ford mounts are duplicated at the base and on the top tank for complete replacement with the standard radiator. All radiators are fitted with the correct hose necks for your engine. Mountings are supplied for a front mounted heavy-duty 13" electric fan, **PBK 2005/RB**, which can be fitted at the time of building or added afterwards. The filler neck uses a modern short pressure cap and we stock several options. The **PBO 0300**, has a 40-mm x 1 row core, the **PBO 0300/HD** core measures 50-mm x 3 row and the special extra heavy-duty big block option, **PBO 0300/ XHD**, has a 65-mm x 4 row core.



### Stainless Steel Overflow Tank

Our overflow tank, **PBO 0700**, is made in polished stainless steel with a knurled filler knob. There are four sizes available, 13", 15", 17" and 19". A pair of tubes at the base adds a further 2.5" (65mm) and provides connections for the hose from the radiator and, where necessary, an overflow tube. Check your connections, the long tube outside the tank is the outlet, and the short tube connects to the radiator. Always use the longest tank that you can fit in the available space. Too small a tank may not be able to contain all the coolant if your engine displaces a lot, whereas a larger tank will just have some unused capacity. Just add **/13**, **/15**, **/17** or **/19** to the part number. Please use the correct hose to connect the tank to your radiator; it needs to be capable of withstanding vacuum as well as pressure, as the coolant is sucked back into the radiator as the engine cools. Our hose, **PBP 2015/BL** (Black), with stainless steel hose clips, **PBQ 0013**, is ideal. A neat finish to the hose ends can be produced using black heat shrink.

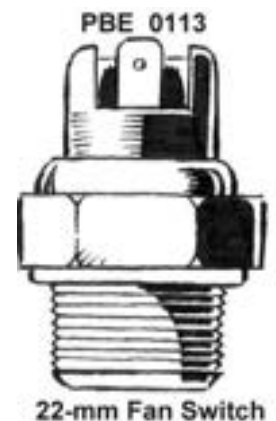


### Radiator Fan for our Alloy Radiator

Our recommended fan, **PBK 2005/RB**, is a heavy duty 13" blowing unit with a powerful motor and will mount straight onto your radiator.

### Fan Control Systems

The 22-mm port in our radiator accepts the range of switches, **PBE 0113**. They are available in a range of temperatures to suit most situations. Always use a relay to control your fan; it reduces the load on the control switch and wiring systems. Our choice is **PBE 0118/40**, a 40 amp relay and matching base, **PBE 01212/H**. Most fans can draw up to 30 amps, and a 40 amp unit has a nice safety margin. We supply a free wiring diagram to help you, just ask when placing an order.



**Tech Tip** Use silicon grease inside the ends of your radiator and fuel hoses before assembly. This will prevent them sticking if you need to remove them as well as reduce the risk of alloy erosion on water pumps and thermostat housings



## Radiator Fans and Switches



**Spal** produces this range of fans in Italy. They are very well engineered with the larger units having heavy-duty motors. They range in size from 9" [225mm] to 15.25" [385mm] in both suction and blowing and all are 12 volt. The fans have a full circle combination guard and shroud, which has a choice of slots for mounting brackets or holes for bolts or skewer kits to attach them to your radiator. The smaller units use a thin 50mm [2"] deep motor and the larger ones are 80mm [3.125"] deep. Some fans use a curved blade, but most have straight blades. We recommend



that all fans be controlled via a fused relay, which in turn is fed via a heavy cable directly from the battery connection on your starter solenoid. We can supply a wiring diagram free of charge with your fan, and can supply suitable relays, bases and control switches. The skewer kit secures the fan by passing the skewers through the radiator core, and is fixed by spring steel speed nuts complete with rubber washers. The sets of brackets, clip into the shroud, which in turn can be bolted on to the edge of the radiator. The electrical switches are mounted in to the lower radiator tank.

**PBK 2000** 10" Blowing radiator fan.

**PBK 2001** 10" Sucking radiator fan.

**See price list for full range**

**PBK 2010** 15" Blowing radiator fan.

**PBK 2011** 15" Sucking radiator fan.

**PBK 2014** Skewer kit for fans, set of four.

**PBK 2015** 19mm fan brackets, set of four.

**PBK 2016** 28mm fan brackets, set of four.

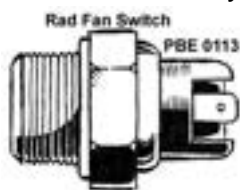
**PBK 2017** 58mm fan brackets, set of four.

**PBE 0118/40** 12 volt 40 amp relay.

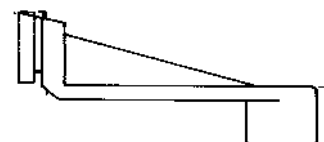
**PBE 0112** Relay base with tag.

**PBE 0127** Relay base free standing.

We stock a range of control switches; some are designed to mount in the radiator, usually the lower tank. Others can be fitted directly into the cylinder head or inlet manifold.



The 22mm unit is very robust, with a boss, which can be soldered into the radiator. The 14mm switches use adapters for engine cylinder or manifold mounting. See the "**SWITCH**" page for full details



### **Fan Bracket**



**Tech Tip:** Always mount the radiator fan motor with the wiring outlet in the lower half of the assembly. This allows any moisture to drain out.

## Brake Parts 1

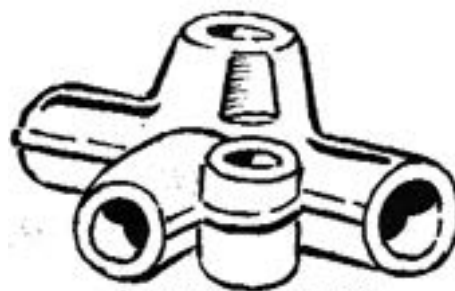
### Brake Pipe Unions

These brass unions are perfect for all brake systems, as we have both Metric and Imperial versions. They all have a lug on the side which has a 1/4" [6-mm] attachment hole. The Metric version has 10 x 1mm threads and the Imperial units have 3/8" UNF threads. We stock three way and four way unions, the former being ideal where a brake line has to be divided, such as for the front brakes or on a rear axle housing. The latter is ideal for adding a brake light switch to the system



**3 WAY UNION**

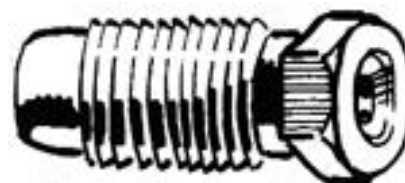
<b>PBC 1030</b>	3/8" UNF Three way brass union.
<b>PBC 1031</b>	3/8" UNF Four way brass union.
<b>PBE 0129</b>	3/8" UNF Stop lamp switch.
<b>PBC 0990</b>	3/8" UNF Inline connector
<b>PBC 0140</b>	10-mm Three way brass union
<b>PBC 0141</b>	10-mm Four way brass union
<b>PBE 0129/M</b>	10-mm Stop lamp switch
<b>PBC 0992</b>	10-mm Inline connector



**4 WAY UNION**

### Brake line fitting

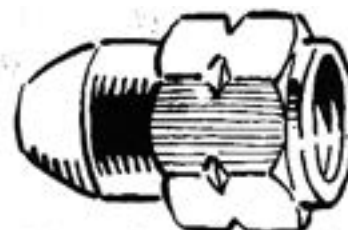
We stock a wide range of brake line fittings in both Imperial and Metric threads as well as a few JIC and NPT American parts. If you are starting a new brake system from scratch, I would suggest that you stick to Metric fittings as the Imperial versions may not be so available in the future.



**Male Tube Nut**

### Tube Nuts

Our tube nuts are made from brass, as this does not corrode as easily as the more usual mild steel versions. Both male and female nuts are available to suit either our 3/16"Ø Copper Nickel or stainless steel brake line tubing. The 12mm tube nuts are used on Tandem master cylinders, usually for the front brake circuit.



**Female Tube Nut**

<b>PBC 1001</b>	Brass 3/8" UNF Male tube nut for 3/16"Ø tubing.
<b>PBC 1002</b>	Brass 3/8" UNF Female tube nut for 3/16"Ø tubing
<b>PBC 1003</b>	Brass 3/8" UNF Bleed nipple for your calliper
<b>PBC 1004</b>	Brass 10 x 1 mm Male tube nut for 3/16"Ø tubing
<b>PBC 1005</b>	Brass 12 x 1 mm Female tube nut for 3/16"Ø tubing
<b>PBC 1006</b>	Brass 10 x 1mm Bleed nipple for your calliper
<b>PBC 1007</b>	Brass 10 x 1 mm Female tube nut for 3/16"Ø tubing



**In Line Connector**



**Bleed Nut**

*Tech Tip:* Take care to fully de-burr the end of the brake tubing and ensure that it is square before trying to flare it.

## Brake Parts 2

### Brake & Fuel line tubing

The two types of brake line tubing that are stocked both have different virtues. The stainless steel line has superb corrosion resistance, is fairly easy to bend, and will polish easily. Normal flaring tools can be used to form the ends, but you will have to cut the tube with a fine tooth hacksaw, as tube cutters will not normally touch it. The Copper Nickel is also corrosion resistant and very easy to bend and cut, it can work harden if re-bent too often but is much less expensive than stainless steel.

**PBC 1008** 3/16" x 0.28" wall Stainless steel brake line tubing.

**PBC 1014** 3/16" Ø Copper Nickel brake line.

**PBC 1015** 1/4" Ø Copper Nickel fuel line.

**PBC 1016** 5/16" Ø Copper Nickel fuel line.

**PBC 1017** 3/8" Ø Copper Nickel fuel & servo line.

### Brake & Fuel line clamps

We stock a choice of two types of brake and fuel line clamps. The most economical version is made from moulded plastic and works like a pop rivet. A socket is placed in a pre-drilled hole and the peg on the clip is locked into place with a light blow. The line is then snapped into place. They are sold in packs of ten. Our other version is a stainless steel clip fitted with a rubber-moulded liner.

### Hydraulic Stop Lamp Switch

Three models are stocked, identical in appearance, but with different threads & are again fitted with two 1/4" spade terminals.

**PBE 0129** 3/8" UNF stop lamp switch

**PBE 0129/M** 10mm metric stop lamp switch

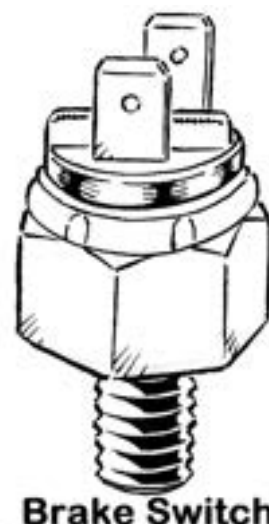
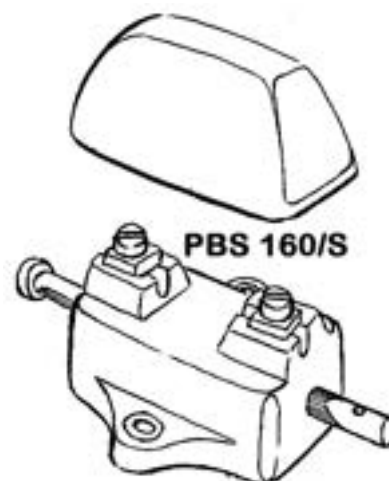
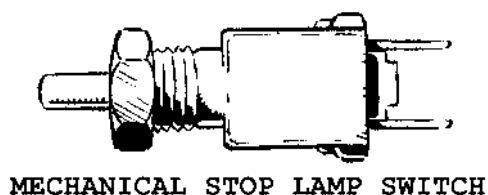
**PBE 0130** 3/8" BSP stop lamp switch.

### Mechanical Stop Lamp Switch

The first version, **PBE 0156**, is a mechanical switch &, as well as being used as a stop lamp switch, could also double as a handbrake warning light switch. The body has a 1/2 UNF thread & two 1/4" spade terminals & the switch is designed to work from the brake pedal. The second type is a "push off" type but can be use as a "pull on" by reversing the switch. This is similar in operation to early Ford and motor cycle systems.

**PBE 0156** Mechanical stop lamp switch

**PBE 1600/S** Mechanical stop lamp switch, push pull

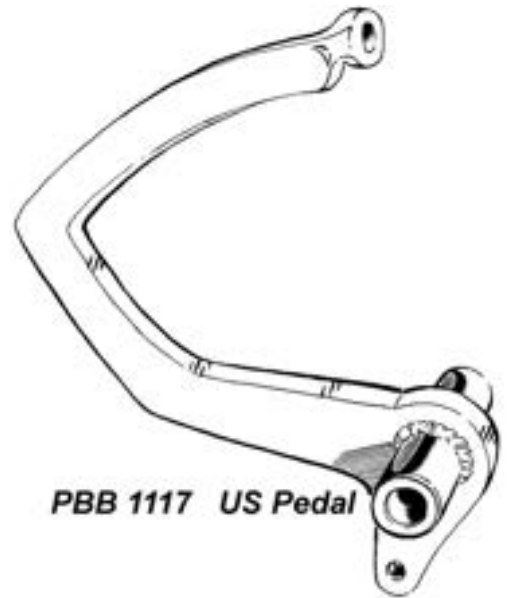


**Tech Tip:** Install brake line clips one every 6", this looks neater & gives more support for the line.

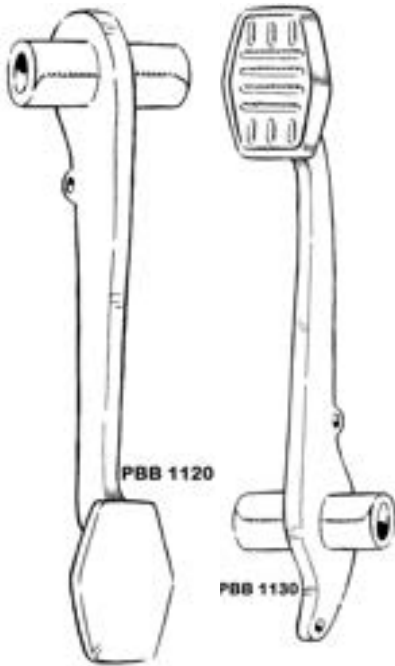
## Brake Pedals & Parts

### U S Style Brake Pedal

This pedal **PBB 1117** is designed to be used under floor and with an angled foot board. The pedal ratio is 5.35:1 and can be ordered with a left or right hand pedal tag making a brake or clutch pedal. Tags can be threaded to suit original style American pedals such as our **PBB1008**, **PBB1008/4** or **PBB1008/R**, which uses a 1/2" bolt. There are a pair of phosphor bronze bushes fitted to the pivot tube and spares are available as part number **PBB1100/B**, which suit a 5/8" OD pivot shaft such as our **PBB 1100/S**.



**PBB 1117 US Pedal**



### Pendulum Pedals

Pendulum or swing pedals can be used under the dash board. They are 5.36:1 ratio and use the same pedal bushes and pivot shaft as our US pedal. A pad is welded on and uses rubber pad **PBR 1006**. These pedals can both be inverted for under floor mounting, and the only difference being in that **PBB1120** uses a front mounted master cylinder, where as **PBB 1130** has a rear mounted cylinder.

### Basic Under Floor Pedal

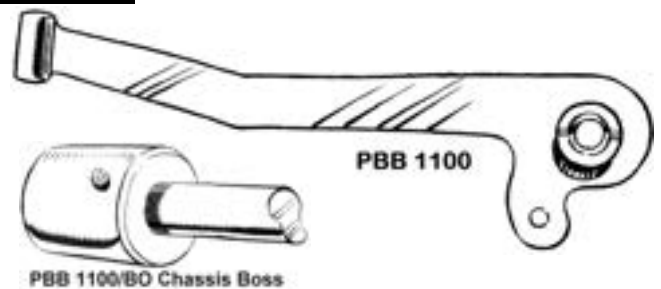
This pedal has a boss on the end to accept a curved bar with a pedal pad attached. The ratio

of 5.36:1 is kept and the bronze

bushes accept our **PBB 1100/S** shaft.

Pedal shaft **PBB1100/S** is 6" (150-mm) long and Longer versions can be made to order.

Chassis Bosses **PBB1100/BO** accept a 5/8" diameter shaft and can be welded to your chassis rails to support the shaft, which is locked in place using a grub screw in the boss.



**PBB 1100/BO Chassis Boss**

5/8" diameter.

- |                    |                                   |
|--------------------|-----------------------------------|
| <b>PBB 1100</b>    | Basic under floor pedal           |
| <b>PBB 1100/S</b>  | Pedal shaft 5/8" (not 16-mm) x 6" |
| <b>PBB 1100/BO</b> | Chassis boss for pedal shaft      |
| <b>PBB 1117</b>    | U.S. style under floor pedal      |
| <b>PBB 1130</b>    | Swing pedal M/cyl. Behind         |

- |                   |                            |
|-------------------|----------------------------|
| <b>PBB 1100/B</b> | Bronze pedal bush          |
| <b>PBB 1100/S</b> | Brake return spring        |
| <b>PBB 1101</b>   | Pedal to pad rod           |
| <b>PBB 1120</b>   | Swing pedal M/cyl in front |

### Angled Foot Board

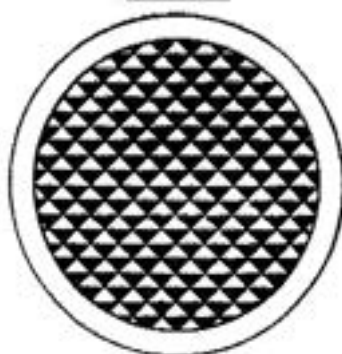


An angled foot board fills the transition between firewall and floor. It allows for a much more comfortable pedal action. The other advantage is that heat from the engine bay is funnelled out under the vehicle, greatly improving air movement and cooling problems. I have also hidden electric oil gauge sender units under the engine side of the board and run a braided stainless steel pipe up to the engine.

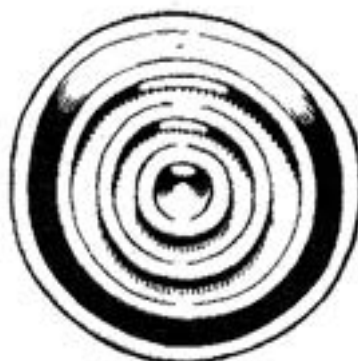
**Tech Tip:** Always check that any pedals have their full "swing" or travel. This is especially important when bleeding your brake system.

## Brake Pedal Parts 2

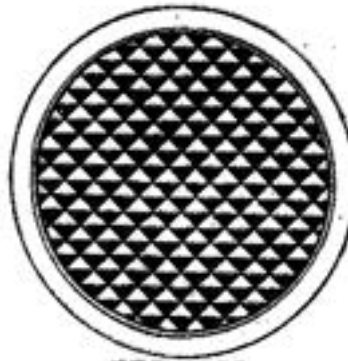
### Pedal Pads



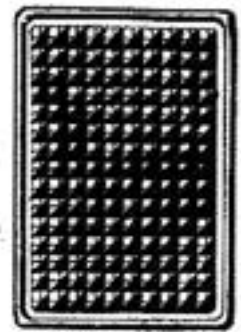
PBR 1008/R



PBR 1008/4



PBR 1008



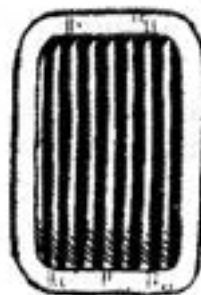
PBR 1015

Our American pedal pads were fitted by Ford at various times. They are all the same diameter. **PBR 1008/R** was used on 1932 vehicles, but would work on other years. **PBR 1008/4**, known as a Bulls Eye pad, has been used on 1941 to 48 cars. Both are bonded on to a metal back plate with a threaded stud (1/2"). The third pad, **PBR 1008**, is pure Street Rod, with a removable rubber pad mounted in a stainless steel base, this in turn is bolted to your pedal with a 1/2" unf countersunk socket headed bolt and nylock nut. We can supply a mild steel boss, **PBZ 3200**, taped or plain that you can weld to your pedal.

### Poluar/Anglia Pedal Pad



PBR 1006



PBR 1004

This pad, **PBR 1015**, is used on most upright Fords from 1949 to 1959 on both brake and clutch pedals. Originally bonded to a metal backing, our version snaps over your pad once the old rubber is removed. We also stock a laser cut mild steel pad, **PBZ 2090**, which can be welded to your brake pedal or to a bolt allowing it to be bolted to your pedal.

A matching throttle pedal rubber, **PBR 1004**, and a mild steel pad, **PBZ 2096**, is also available.

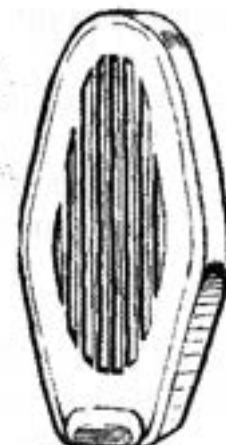
Model A Pedal Rubbers, **PBR 1200**, are neat, as they can be used horizontally as per original, or vertically where space is at a premium. I used them in my Bob Tail T. Again we can supply a laser cut metal pad, **PBZ 2080**, to suit.

We can supply spherical rod ends (Rose Joints), male & female versions, as well as clevises in various sizes. Suitable push rods can be made to order. Most of these parts can be used for clutch systems.

- PBB 1103** 8-mm female rod end for brake push rod.
- PBB 1104** 10-mm female rod end for brake push rod.
- PBB 1106** 3/8" UNF male rod end for brake push rod
- PBB 1109** 8-mm clevis with 7-mm pin hole
- PBB 1110** 3/8" UNF clevis with 5/16" pin hole



SERVO ROD END



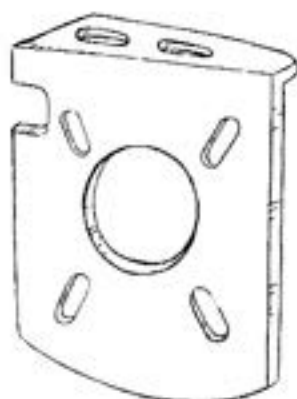
PBR 1200



PBZ 2080

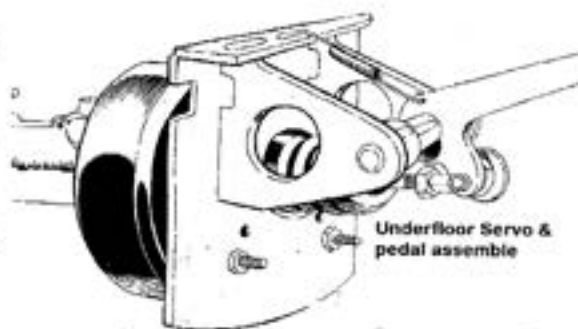
**Tech Tip:** On final assembly check that your master cylinder is fully applied by your brake pedal, check for full stroke!





Servo plate

We produce two servo chassis plates for use with 7" (English) or 6" (US) **PBB 1003/A** under floor servos. The holes for the servos are slotted to allow for various models of servo, the English 7" plate is **PBB 1003** and the American 6" plate is **PBB 1003/U**. A pair of braces are included, a large top brace and a small corner brace, all in 6-mm mild steel. There are access ports cut outs in the chassis side of the servo plate to allow for fuel and brake lines etc. Don't forget you will have to reverse the plate for left hand drive cars. If you would like us to weld the plates together just add **/A** to the part numbers when ordering. We can supply the side plates, pedals, spindles and chassis bosses for you to create your own assembly. A neat trick with Popular's and Anglia's is to move the servo plate back down the chassis under the rear seat area. Use a long pushrod with a Rod end at the pedal and a thread to match the servo unit at the other end; we can make them to order. This system frees up space in the peddle area for clutch master cylinders, exhaust headers and brake and fuel lines.



access ports cut outs in the chassis side of the servo plate to allow for fuel and brake lines etc. Don't forget you will have to reverse the plate for left hand drive cars. If you would like us to weld the plates together just add **/A** to the part numbers when ordering. We can supply the side plates, pedals, spindles and chassis bosses for you to create your own assembly. A neat trick with Popular's and Anglia's is to move the servo plate back down the chassis under the rear seat area. Use a long pushrod with a Rod end at the pedal and a thread to match the servo unit at the other end; we can make them to order. This system frees up space in the peddle area for clutch master cylinders, exhaust headers and brake and fuel lines.

### Brake Master Cylinders



Tander Master Cylinder

These US made brake master cylinders **PBB 1004** have four ports, allowing brake pipes to exit on either side of the unit. The bore is 26-mm (1") and suits disc/drum brake systems.

We suggest another similar unit **PBB 1020**, which has a 1.25" bore and would work on disc/disc systems with large brake caliphurs.

**Note:** American master cylinders use a variety of brake pipe ends. Three of the most common sizes are 9/16" x 18, 1/2" x 20 and 3/8" x 24. Other threads are used including some the same size as the three I have listed but with different thread pitches. American pipe fittings do not use a plain area before the start of the thread as most of English fittings do. This means that you should not use English tube nuts on American master or wheel cylinders as only one or two turns will be engaged. If your cylinder has different sized outlets the largest usually connect to the front brakes.

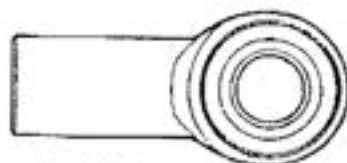
### Brake Servos

The servo we stock **PBB 1000/A** is American made. The body is 7" (178-mm) diameter at its widest, 3.75" thick and has four mounting studs on 85-mm centres. The two mounts for the master cylinder are on 86-mm centres. A push rod and lock nut with a 3/8"

US Servo  
PBB 1000/A

UNF male thread connects to your brake pedal.

### Rod End



SERVO ROD END

A rod end is the simplest way to connect your brake pedal to our servo. We stock 3/8" UNF female **PBB 1002** and male ends **PBB 1002/M** as well as a rubber boot kit **PBB 1002/B** to protect them.

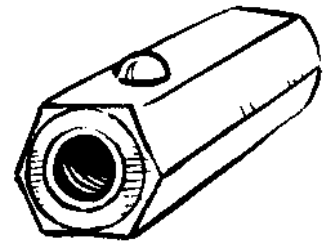
**Tech Tip:** The draught excluder used for house doors can be fitted to brake pedal slots in your floor. The brush type works well.

## Brake Parts & HA Front Hubs

### Residual Valves

Residual valves are extremely useful for under floor braking systems, especially where the brake reservoir is mounted directly onto the master cylinder. They retain a small amount of pressure in the system, which reduces pedal travel as it prevents the calliper pistons 'knocking back'. The added advantage is that the system is easier to bleed out. We stock two separate pressures, a two-pound version for disc brakes is anodised blue in colour, and a ten-pound version for drum brakes is anodised red. A pair of NPT to UNF adapters are usually needed to plumb each valve in.

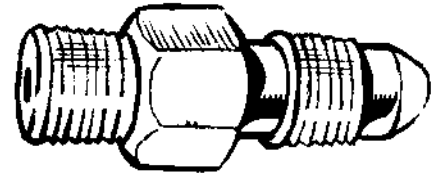
#### RESIDUAL VALVE



<b>PBC 1200</b>	1/8 NPTF to 3/8" UNF adapter, line locks etc
<b>PBC 1210</b>	2LB Residual Valve (blue) for disc brake systems
<b>PBC 1212</b>	10LB Residual Valve (red) for drum brake systems

### Copper Sealing Washers

Plain, annealed copper washers are ideal for sealing flexible hoses to callipers & other areas, where two mating surfaces need to be sealed.



#### NPT TO UNF ADAPTER

<b>PBC 1030</b>	Soft copper sealing washers
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### Alloy Front Hubs

Use these CNC machined replacement alloy hubs, **PBC 3100**, to change to a 5 stud 4.75" PCD, Chevrolet and Jaguar. They use the standard HA wheel bearings and brakes.

We are reintroducing our HA disc brake conversion, **PBC 3140**, using Ford Capri Injection ventilated discs and Ford Escort Mk 4 XR3i callipers. Again they are CNC machined alloy and only available with the 4.75" x 5 (Jaguar/Chevrolet) wheel pattern using 1/2" UNF wheel studs. A pair of machined alloy calliper holders is supplied with full instructions



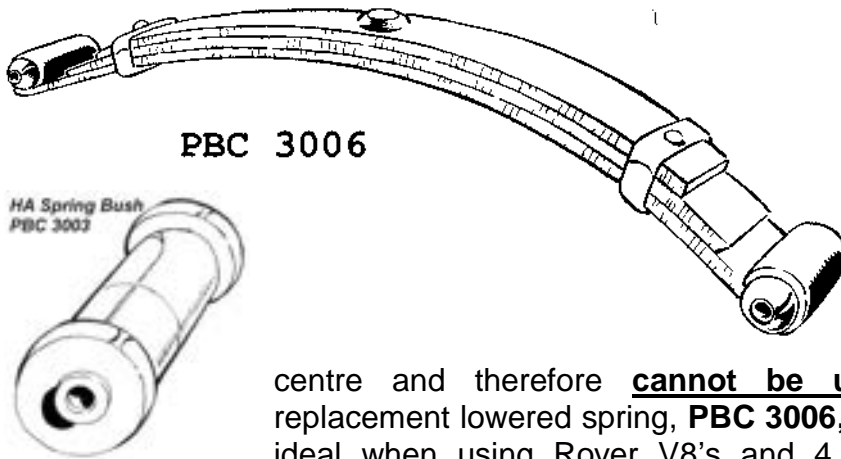
**Note:** Vauxhalls had a policy of dual-sourcing their spares; this means that a lot of parts such as brakes and steering are not always interchangeable. When hunting for replacements you will need to know if you have Girling or Lockheed brakes, for instance, & even then, check against your old unit.

### Flexible Brake Hoses

We stock a replacement braided stainless steel front brake hose, **PBC 3140**. They replace the standard rubber hoses having a bulkhead fitting at both ends, which match up to the existing brake pipes. We also stock another hose **PBC 3120** which can be used for a rear axle being 350-mm long with a 3/8" UNF bulkhead fitting and locknut on one end for a chassis tag. The other end has a 3/8" UNF connection for a "T" union. A version with metric fittings can be supplied or custom made hoses to order.

**Tech Tip;** Stainless steel braided flexible brake hoses are a real advantage in your brake system. They last longer, are better protected & provide a firmer feel to your pedal.

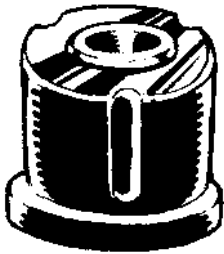
## Vauxhall HA Suspension Parts 1



### Viva HA Front Springs

Our HA front springs are designed to lower your HA front suspension by approx' 30mm [1.25"] and still leave a usable amount of suspension movement. Please note that some early factory springs did not have locator buttons in the

centre and therefore cannot be up-rated. Our standard 3-leaf replacement lowered spring, **PBC 3006**, completely replaces the original, ideal when using Rover V8's and 4 cylinder engines. The four-leaf version, **PBC 3007**, is for vehicles with heavy engines such as V6 Fords. The springs have a modified curve as well as a reversed spring eye. We now supply poly spring bushes, **PBC 3003**, which are much easier to fit than the original bushes even if you can find them.

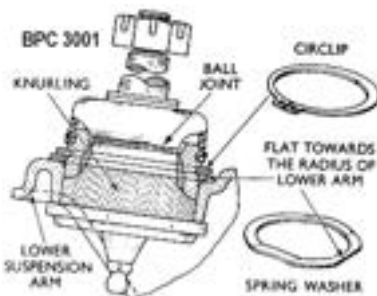


**PBC 3001/2**

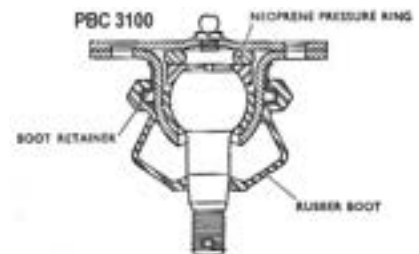
### HA Front Wishbone Bushes.

We have re-manufactured these bushes, as they are no longer available from Vauxhall. Our versions are moulded in a modern material for long life and have a stainless steel inner sleeve. **Note when fitting;** please remove all the old bushes, including the metal outer sleeve, which appears to be part of the wishbone. Full instructions are included with each set of four bushes. Replace Vauxhall part 6375365 [top] with **PBC 3001** and 6368854 [lower] with **PBC 3002**.

### HA Suspension Spares



We try to stock a range of parts for your HA front suspension, but as with any older vehicle, parts are drying up. We currently hold stocks of non-pattern steering UJ's, **PSW 0200**, track rod ends, **PBC 3102** and upper outer wishbone pivots, **PBC 3104**. We can also supply fully adjustable, gas filled dampers, **PBC 3130**, to special order. They can be



fully rebuilt and are of a very high quality. Flexible stainless steel replacement front hoses, **PBC 3115**, make a tough and long lasting replacement for the original rubber hoses.

Moulded steering rack mountings, **PBC 3003/S**, are now stocked and sold in pairs.

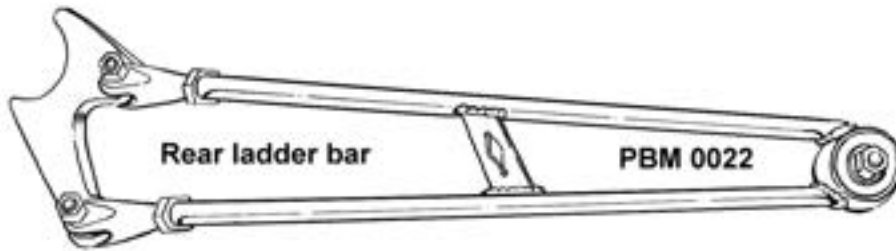


- |                 |   |                   |                                |
|-----------------|---|-------------------|--------------------------------|
| <b>PBC 3100</b> | Upper Outer W/bone Ball Joint.  | <b>PBC 3101</b>   | Lower Outer W/bone Ball Joint. |
| <b>PBC 3102</b> | Steering Track Rod End.   | <b>PBC 3003/S</b> | Steering Rack mounts, pr.      |
| <b>PBC 3104</b> | Upper outer wishbone pivot shafts (while stocks last)                     |                   |                                |
| <b>PBC 3110</b> | Wheel bearing kit inc. inner and outer wheel bearings and seal, per wheel |                   |                                |

**Tech Tip:** Morris Minors share the same 4" x 4 PCD wheel bolt pattern as Vauxhall HA's & can provide a cheap plain 14" steel wheel, looks great with a trim ring & Baby Moon centre cap.

## Rear Suspension 1

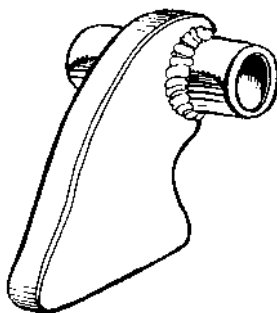
### Ladder Bars



Our ladder bars, **PBM 0022**, form the basis of a neat and practical rear suspension system. The tubing is thick wall CDS material now with a pair of front mounted poly bushes **PBZ 0041** with stainless steel liners. The

rear end of the tubes is fitted with our clevises, **PBM 0013**, which in turn are bolted to a pair of our **PBN 0014/M** axle plates. The plates should be mounted outboard on the rear axle for stability. They are best mounted close to the centre line of the vehicle at the front, our **PBZ 0036** chassis brackets are ideal, being extra long for trimming. The ladder bars come complete from the front mounting bolts to the rear axle plates. A panhard rod, **PBM 0021**, will be needed to laterally locate the suspension. Then it just remains to decide whether to use a pair of coil over dampers such as **PBM 0015/A** or a transverse leaf spring. The latter can be used with brackets, **PBZ 2100** to **PBZ 2110/A**, for mounting the spring on top of the axle, or front or back mounting using **PBM 0070**. In either case you will need shackle kits, **PBI 1150**, (1.75" spring), **PBI 1152** (2") and **PBI 1154** (2.25") made in mild or stainless steel. We also supply "Poly-ride", a slippery plastic strip fitted between spring leaves to soften the ride. Sizes for 1.75" **PBI 1003**, 2" **PBI 1003/A** plus 2.25" **PBI 3001/B** are well worth fitting. We can also have leaf springs manufactured to your requirements.

### Top Mount Spring Hanger

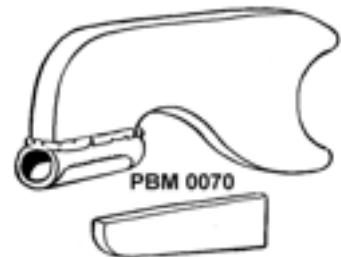


Designed to allow a transverse spring to be fitted on top of an axle, this bracket can be produced in a number of different widths to accommodate our range of shackles. Mainly used on Model A and Model T lakes modified's. Individual parts can be supplied for home assembly; we strongly advise that you TIG weld this bracket. Note: Can be used on the front or rear suspension.

**PBZ 2100** Bracket kit for top mounting 1.175" Cross-spring  
Other shackle sizes to order.

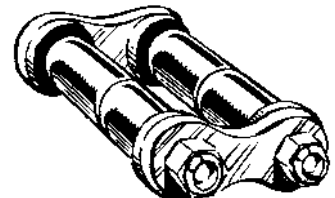
### Rear Mounted Spring Hanger

The Rear mounted spring hanger, **PBM 0070**, fixes a transverse spring to your rear axle. Different shackle widths can be catered for from 1.75" to 2.25". The main bracket is laser cut from 12-mm mild steel and a 6-mm brace is included.



### Spring Shackles

These shackles are a modern version of the early Ford items used on models from the twenties. Designed to suit a 1 3/4" wide spring with a 3/4" internal eye diameter, they come complete with hardwearing Poly Bushes. We stock both mild & stainless steel versions as well as spare replacement bushes. These shackles have a wide variety of applications other than for Fords; we regularly fit them to our custom built springs. The Bushes have a 1/2" internal diameter, an 3/4" outside diameter, are 1" long & 7/8" diameter head.



<b>PBI 1150</b>	Mild Steel 1.75 front shackle kit	<b>PBI 1151</b>	St/Steel 1.75 front shackle kit
<b>PBI 1152</b>	Mild steel 2" spring shackle kit	<b>PBI 1154</b>	Mild steel 2.25 spring shackle kit
<b>PBI 1150</b>	Replacement "Poly" short shackle bush		

## Rear Suspension 2

### Panhard Rod Kit

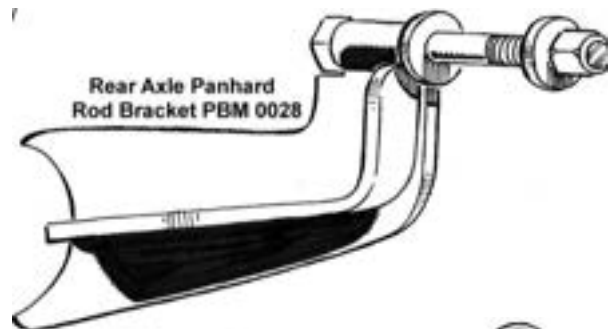
This consists of the axle bracket, **PBM 0028**, two chassis brackets, **PBJ 2008**, a ½" bolt & nylock nut, **PBM 0023**, & our Panhard rod, **PBM 0021** (36" long), though other lengths are available to order. The rod is adjustable to allow for perfect centering of the rear axle & the kit is ready to weld. **PBM 0033** Panhard Rod Kit

### Panhard Rod

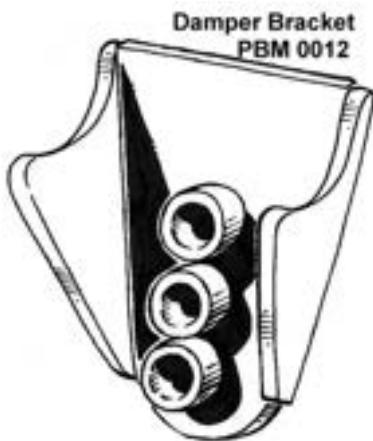
One end of the Panhard rod is fitted with a fixed ½" ID. ⅝"-UNF . Micro-Flex unit, **PBM 0010**, the other has an adjustable version to allow for final centring of the rear axle. The tubing is high quality thick wall seamless tubing TIG welded to the fixed end, with the thread cut directly into it for maximum strength. The standard length is 36", but we can produce other sizes to order. **PBM 0021** Adjustable Panhard rod 32" long

### Panhard Rod Axle Bracket

This bracket, **PBM 0028**, can be welded to your rear axle, ideally in front so that the Panhard rod can pass over the diff. The bracket is laser cut from 10-mm plate with a 6-mm brace TIG welded to it. Comes complete with a nut and bolt.



### Rear Axle Damper Bracket



Our damper brackets, **PBM 0012**, are TIG welded together. They come complete with tapered spacers and high tensile cap head 16-mm [5/8"] bolts with nylock nuts and safety washers. There is a choice of three positions for the lower damper bolt. We can provide a mounting bar for the top damper bolts to special order.

### Dampers & Springs

We supply a 13" (open) 9" (closed) adjustable damper unit, **PBM 0015**, with 5/8" diameter eyes at either end. The unit uses 2.25" Internal diameter springs and the lower spring seat is internally threaded to allow adjustment to the height of the vehicle. The other adjustable feature changes the flow of damping oil in the unit, which stiffens or softens the ride. Finally the oil in the damper is topped off with a gas, used to balance the expansion of the hot damping oil. We can supply a 14" version of this damper to special order. We use high quality springs, as the cheaper versions often settle dramatically, quickly and often unevenly. Our springs, **PBM 0016**, and, **PBM 0016/H**, are either supplied with our dampers ,or separately if you already have your dampers.



### "C" Spanners

We produce two "C" spanners, **PBS 2000**, for 2.25" springs and, **PBS 2001**, for 1.75" springs. Both are laser cut from mild steel. They fit other damper units, some use two locking rings and are best with two spanners.



**Tech Tip:** If you are buying coil springs for dampers a guide to the quality is having their spring rate and height engraved on one of the ground ends, e.g. 250 x 9.

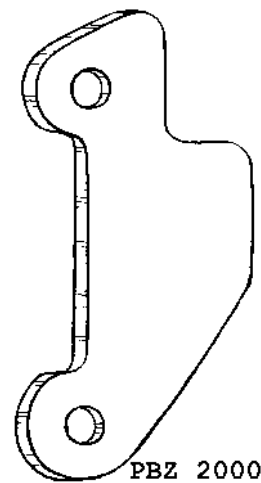


## Rear Suspension parts 3

### Four Bar Chassis Brackets

These brackets are designed to mount the front end of a rear axle four-bar radius rod system to your chassis. The laser cut bracket has two 13mm [1/2"+] holes set at the industry standard distance of 120-mm [4.75"] centre to centre. There is a notch taken out, measuring 58mm high by 30mm wide, which can be used to weld the bracket to a box section cross member. We can add extra strength by welding a 3mm strap between a pair of plates. Sold in sets of four or assembled pairs.

**PBZ 2000** Chassis brackets for four bars, x 4 plates.  
**PBZ 2000/A** Welded Chassis 4 Bar Brackets back strap, pair



### Four Bar Axle Brackets



This rear axle bracket, **PBM 0019**, fits a 3" axle side tube. The centre line of the axle runs through the upper bracket holes. These 13-mm holes are on the standard 120-mm [4.75"] and are laser cut from 6-mm plate. The assembled plates, **PBM 0019**, are TIG welded to a 3-mm backing strip and sold in pairs. The four unwelded plates, **PBM 0018**, are sold in fours.

A second design is an equidistant bracket, **PBM 0041**, & puts the axle in the centre of the bracket. This raises the four bars into the car as well as allowing the use of a longer radius rod when welded to the rear of the axle. This is important on cars like

Popular's where there is less room for long radius rods. A boxed version of the bracket is available, part number **PBM 0042**.



### Four Bar Radius Rods



We make our radius rods and panhard rods from 7/8" [22-mm] CDS tubing with 3/16" walls. This allows us to tap a 5/8" UNF thread directly into the tube for maximum strength.

Our Micro-Flex bushes, **PBM 0009**, can form the basic for radius rods, ladder bars, and panhard rods as well as "A" frames. They are produced in a long lasting poly material and

inexpensive to replace. They are used in our Micro-flex adjusters, **PBM 0011**, and Micro-flex units, **PBM 0010**. The basic Micro-flex unit, **PBM 0010**, consists of an outer steel shell with two micro-flex halves and a steel liner with a 1/2" central hole. The adjusters have a 5/8" UNF stub TIG welded on to allow for setting up, and use a lock nut, **PBM 0036**, in mild steel or, **PBM 0037**, in stainless steel.

### Clevis

Our 5/8" UNF clevis's are available in mild steel, **PBM 0013**, or stainless steel **PBM, 0013/S**. They are intended to be used as a method of adjustment for ladder bars. Having no bearing, it should not be used as a pivot of any sort.

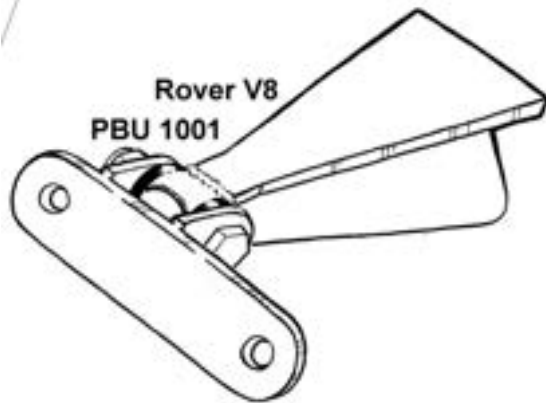


**Tec Tip** When assembling Micro-Flex bushes only apply lubricant to the inner tube. We use silicon grease but apparently copper grease is very good.

# Engine Mounts

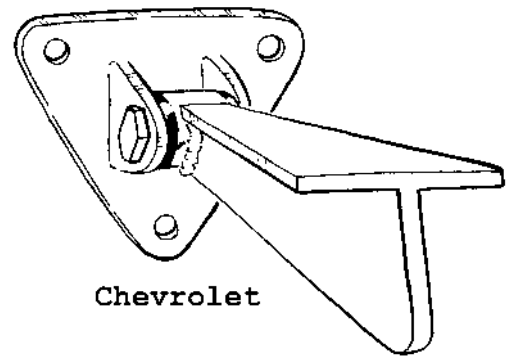
## Universal Engine Mounts

We produce several types of engine mounts for those wishing to fit their own engines. The block brackets bolt straight onto your engine, usually in exactly the same way as the originals, while the chassis brackets can be trimmed to fit your chassis. Insulation is by a pair of Micro-flex ½'s, which are cheap and easy to replace. Our Rover mounts **PBU 1001** have an offset built into them to provide more room for an exhaust system.



to provide more room for an exhaust system.

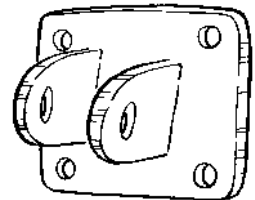
Our chassis brackets are extra long to accommodate wider chassis. The Chevy mounts **PBU 1002** will fit big or small block V8's. The Pinto version **PBU 1003** is suitable for both 1.6 and 2.0 litre SOHC Ford engines. General instructions are provided with the kits. The Ford small block mounts will suit 289 to 302 engines and may suit other big block V8's using two 7/16" diameter bolts



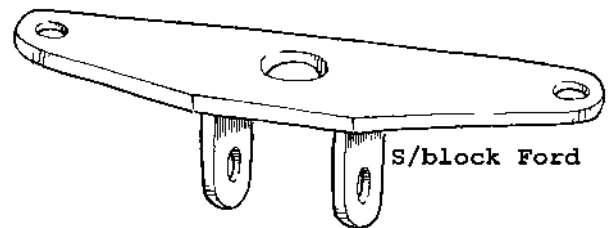
Chevrolet

on 176-mm centres. We plan to add other versions to our range so please check our current price list for availability.

- PBU 1001** Rover V8 engine mounts.
- PBU 1002** Chevrolet V8 engine mounts.
- PBU 1003** Ford Pinto engine mounts.
- PBU 1004** S/B Ford V8 engine mounts
- PBU 1005** Ford Zetec engine mounts
- PBM 0009** Black Micro-Flex half's.
- PBM 0010** Complete Micro-Flex unit



Pinto

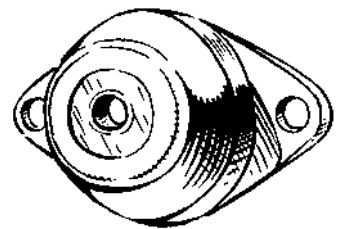


S/block Ford

## Rubber Engine Insulator.

Similar in appearance to the early Ford engine mounts used on Flathead V8's. The centre is threaded to accept a ½"unf bolt while the fixing bolt holes are 8mm Ø on 76mm centres. Similar mounts are used on Daimler V8's and Jaguars where they are also used as bumper mounts. We can supply a bolt fixing kit.

**PBU 2400** Bonded rubber engine mount.



PBU 2400

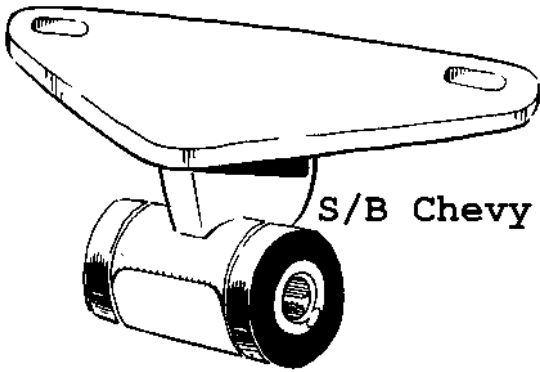
## Small Side Valve Ford Engine Mount

Similar in appearance to **PBU 2400** {above} our **PBR 1018** is a replica of the engine mount used by Ford for their side valve four cylinder engines under part number 6038. Some customers use two when fitting early gearboxes with a saddle style mount such as the large 24 stud "flathead" boxes.



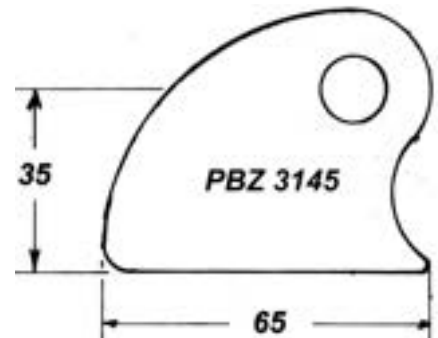
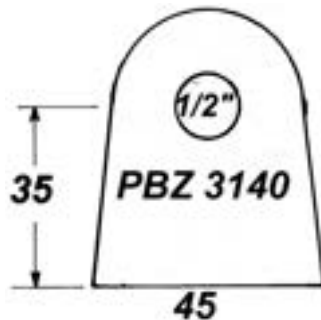
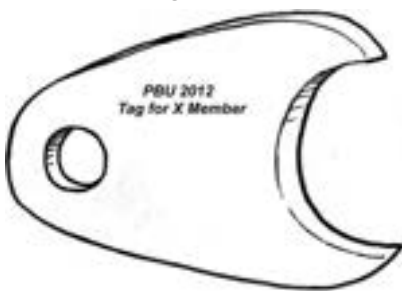
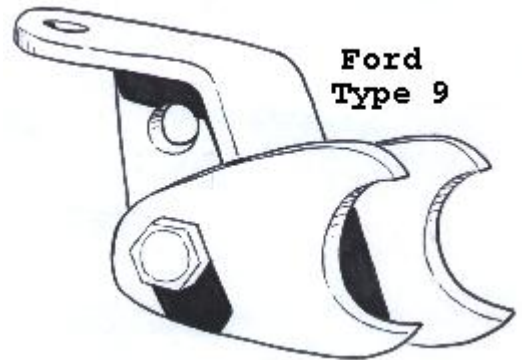
**Tech Tip:** Where using our engine mount kits, bolt the block bracket on & make up cardboard or MDF templates before cutting the chassis brackets.

## Gearbox Mounts

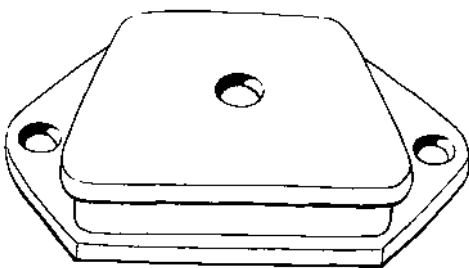


We have a range of gearbox mountings to go with our transmission cross member. The first of these can be used with the type 9 Ford 5 speed gearbox as used behind Pinto OHC engines. It should be suitable for a range of Ford gearboxes such as the 2000E & 105E models. A micrflex bush is used to provide a degree of both insulation and movement.

Another version suits Chevy **PBU 2002**, Ford **PBU 2003** & Rover **PBU 2000** automatic & manual gearboxes boxes. The tags can be revolved to raise or lower the gearbox in relation to the centre of the cross member. The mount is shown with our crossmember tags, **PBU 2012**, for a round crossmember but both, **PBZ 3140**, D shaped tag or **PBZ 3145**, our curved tag could be used when fitting a square box cross member.



### Low Profile gearbox mount



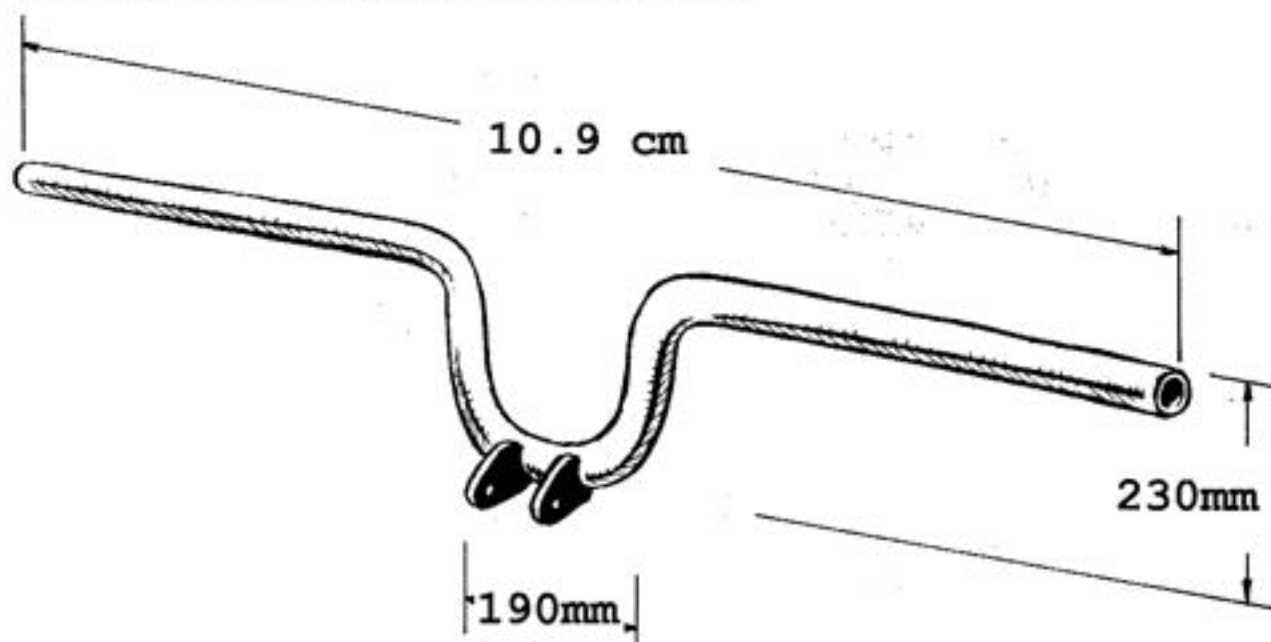
The main advantage of this mount, **PBU 2020**, is its low profile at 23-mm thick. Solid base and top plates are bonded to a rubber block making for a rugged mount. The top plate measures 63-mm x 76-mm and has an 11.5-mm hole in the centre. The base measures 64 x 118-mm with two 10.2-mm holes, 95-mm apart. A 34-mm hole in the base plate gives access to the hole in the top plate. The mount could of course be reversed or used to mount sub frames.



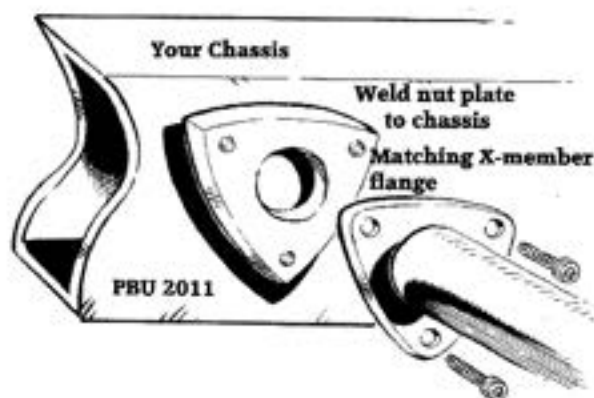
**Tech Tip** The installation angle of most carburetted engines is controlled by the cab flange on the inlet manifold. Setting the flange level will allow you to measure the engine angle.

Gearbox Cross Member

Produced in 3.2mm mild steel tube 38mm diameter, this cross member, **PBU 2010**, can be used, not only to support your gearbox, but also as a mounting point for master cylinders, servos or as the basis for a "K" member. Shown with optional tags, **PBU 2012**, for our gearbox mount.

Bolt in Plate kit for X-Members

This kit, **PBU 2011**, is designed to be used with our universal cross member, **PBU 2010**, but would fit any 1.5" diameter tube. The weld-on nut plate is tapped 8-mm and has plenty of weld area round the edge and as the central hole. The chassis rail needs to have clearance holes drilled to match the bolts, or you could drill 6.8mm (17/64") tapping size, and run an 8-mm tap into the chassis wall.

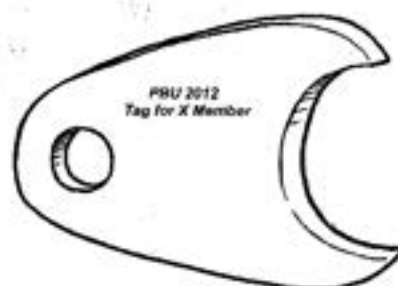


First cut the cross member to fit the chassis rails, less 20mm to make room for the nut plate. Fit the cross member flanges to the end of the cross-member, if they are a tight fit so much the better, it will save you tack welding them. Bolt the assembly together. If you prefer, use a grinder to trim the bolts so that they are fully tight before they touch the chassis rail, it will save you having to drill them. Longer bolts are available if you need them. Tack the nut plate to the chassis and once the

cross member is correctly positioned, tack the thinner flange to the cross member. We suggest you TIG weld the assembly if possible, if not MIG or stick weld.

Tags for Gear box mounts

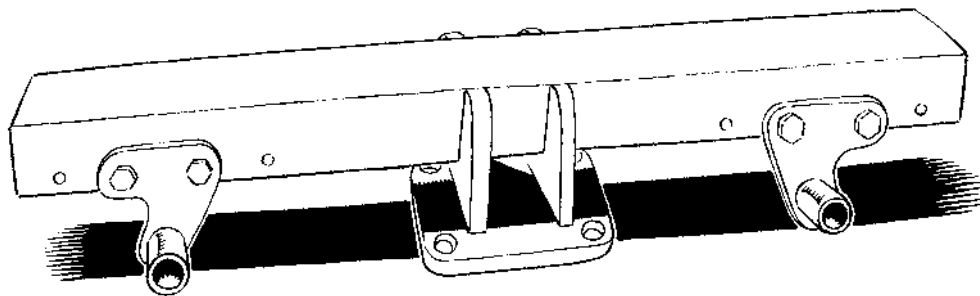
These tags, **PBU 2012**, are laser cut from 6-mm mild steel plate and are designed to fit our tubular cross member. A 1/2" hole matches our transmission mounts.



**Tec Tip;** A lot of Rover, Volvo, Jaguar & Land Rover prop shafts share a common flange pattern. This is useful when scrap yard hunting.

## Jaguar IRS X-member Parts 1

The Jaguar independent rear suspension is one of the best systems readily available. Once overhauled & with the correct spring & damper rates, you will have a very strong rear suspension, easily able to handle an American small block with the possibility of a limited slip centre section, if you need it. Our cross member, **PBJ 2000**, is designed to make fitting the Jaguar IRS easy. We build models to suit S type or XJ. All versions have adjustable damper support brackets, allowing a wide variety of damper angles & axle widths. The diff. housing is located using the standard Jaguar tapered bolts, which we stock, & the dampers need a pair of our pattern damper shafts similar to the stock Jaguar lower shafts. The cross member can be made to any width. Our isolated cross member, **PBJ 2001**, has micro-flex bushes fitted between the top diff. plate & the main member to reduce vibration.

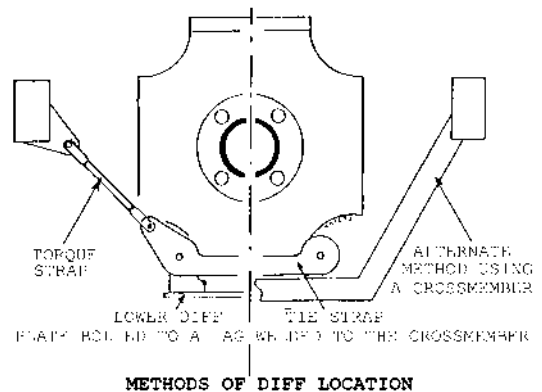
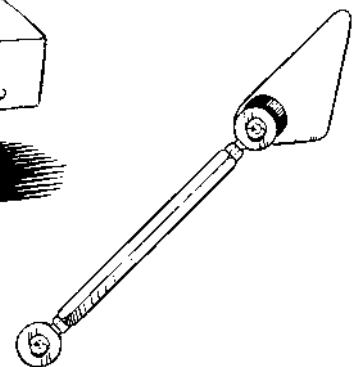


### Anti-Climb Bars

Designed to work with our front tie straps, these bars are important, as they transmit loads from the base of the differential into the chassis, & help prevent diff. windup. Spherical bearings allow about 25mm of adjustment when setting them up, & a pair of weld-on chassis tags are included, as well as stainless steel safety washers, button head bolts & nylock nuts. They are available in stainless or mild steel, in various lengths & are made from hexagonal bar. All parts are available separately.

**PBJ 4010** Mild Steel Anti Climb Bar Kit.

**PBJ 4011** Stainless Steel Anti Climb Bar Kit.



### Lower Diff Support Plate

An alternative method to the anti climb bars is an extra long lower diff support plate, which we produce. This allows a cross-member to be added to the chassis, which in turn has a small bracket welded to it, allowing the plate to be bolted to it. It comes complete with shims, as you do not want any pre-load between the plate and the chassis bracket. The added advantage is that the plate ties the lower wishbone trunions together. We also produce a smaller plate without the facility to bolt to a cross-member, as we have found that these plates remove a lot of the strain from the trunion bracket to diff bolts, a common failure point on standard Jaguar IRS's. All plates are produced in 6mm material.

**PBJ 4113** Mild Steel Long Lower Support Plate with bracket & fixings.

**PBJ 4110** S/Steel Lower Support Plate.

**PBJ 4111** Mild Steel Lower Support Plate.

**PBJ 1002** St/Steel Bolt Kit for diff support plates.

**Tech Tip;** Always safety wire the lower trunion to differential housing bolts as they work loose with amazing frequency. We stock stainless steel locking wire if you need it.

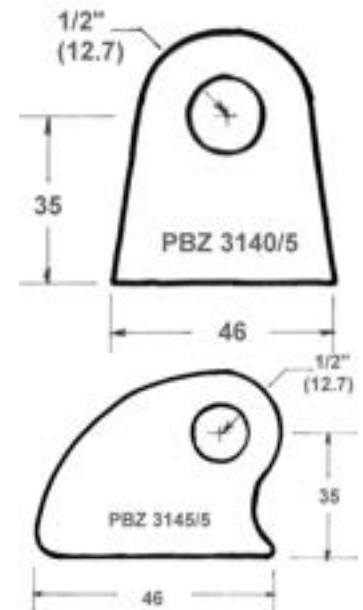
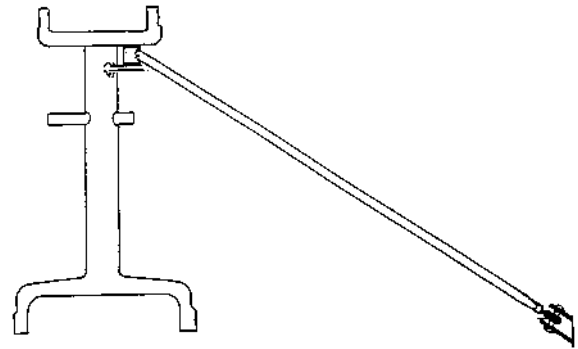


## Jaguar IRS Parts 2

### Rear Radius Rods

Used to locate the hub end of the rear wishbone, these radius rods help to reduce the load on the rear suspension. For correct geometry, the front pivot should be on the same axis as the inner wishbone pivot. Our rods are custom made for your application, and we are happy to supply a diagram showing you what measurements we require. They are made from CDS tubing, with a special micro-flex unit at the hub end and a spherical rod bearing at the chassis end. Please note the rod bearings are not supplied in the cost of the rods. We strongly recommend that you fit our optional rubber boot kits to the spherical rod ends, as this extends their life considerably. Our special radius rod chassis brackets make fitting the front of the radius rod easier, we have two patterns. Please use them with our special micro-flex bolts.

- PBJ 2005** Rear radius rod, please specify length and axle type.
- PBJ 2006** Spherical rod end bearing for above, 1/2" UNF.
- PBJ 2007** 1/2" Rubber boot kit and spacers for above.
- PBJ 2008** Rear radius rod chassis bracket, use in pairs.
- PBJ 2009** Rear radius rod chassis bracket curved, use in pairs.
- PBM 0023** 1/2" x 3" UNF micro-flex bolt & nylock nut.
- PBJ 1104** Repro R/R. Rod bolt + nut, S type/Mk10.
- PBJ 1105** XJ Series radius rod bolt, 1/2" UNF.

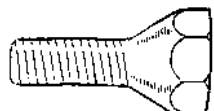


We stock both the early, and now unobtainable, S type and Mk 10 bolt and nylock nut, which requires the hub to be removed before the bolt can be drawn out. The XJ however, uses a conventional bolt with part of the head removed to clear the damper support shaft, which is threaded directly into the wishbone, making for easier removal. To quickly tell which you have: if you can see a nylock nut, you have the early version, if you have a bolt with part of the head missing, it is XJ.

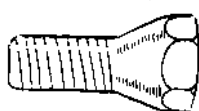
### Spare Parts

We stock the new version of the Differential top bolts, which have a locking material on their shank instead of the drilled head of the older unit. The trunion bolts have two different lengths and half heads are often badly worn with dire effect on the trunion brackets.

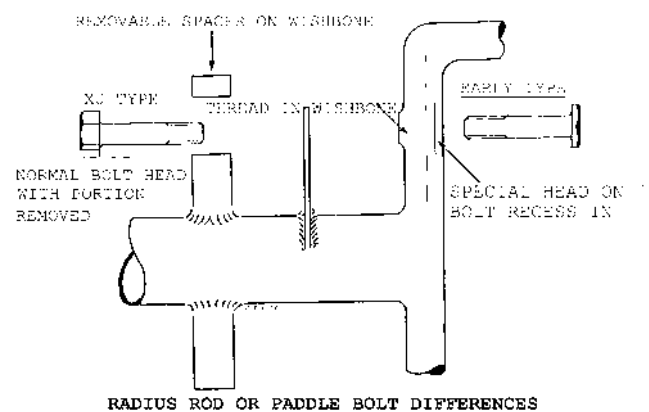
- PBJ 1106** Diff. top bolt.
- PBJ 1107** Trunion bolt, short.
- PBJ 1108** Trunion bolt, long.
- PBJ 5000** U.J. prop shaft, 1963-92
- PBJ 5001** U.J. driveshaft, Rover, Jaguar & Volvo



TOP DIFF BOLT



TRUNION BOLT



PBJ 1104 Early  
radius rod bolt

**Tech Tip:** Take care when removing lower fulcrum pins from Jaguar rear hubs, as there are some very fine shims controlling the end float on the bearings.

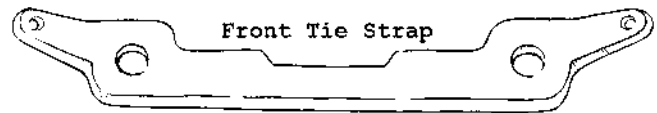
## Jaguar IRS Parts 3

### Tie Straps

Tie straps are important in a Jaguar independent rear suspension set-up, as they tie the two lower wishbone fulcrum shafts together. In standard set-up the steel cage does this job, but as most street-rodders throw the cage away, something must be used to replace it. We produce versions in mild steel, stainless steel and aluminium. Some have an extra pair of tags on the end to accept our anti-climb bar kits.

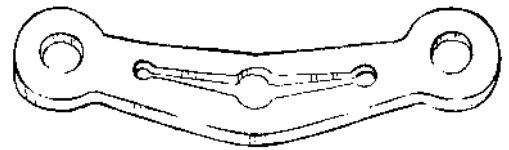


Rear Tie Strap

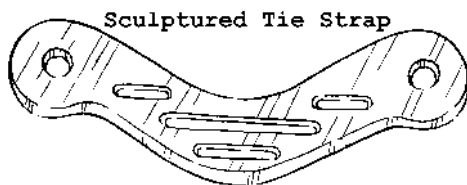


Front Tie Strap

- |                   |   |
|-------------------|---|
| <b>PBJ 1000/M</b> | Mild steel rear tie strap,                |
| <b>PBJ 1000/S</b> | Stainless steel rear tie strap            |
| <b>PBJ 1001/M</b> | Mild steel front tie strap, with tags     |
| <b>PBJ 1001/S</b> | S/steel front tie strap, with tags        |
| <b>PBJ 1006/M</b> | Mild steel rear Keyhole tie strap.        |
| <b>PBJ 1006/S</b> | S/steel rear Keyhole tie strap.           |
| <b>PBJ 3000</b>   | Ford script aluminium tie strap, polished |
| <b>PBJ 3001</b>   | Bowed aluminium tie strap, polished       |
| <b>PBJ 3002</b>   | Maltese Cross tie strap                   |



Keyhole Tie Strap



Sculptured Tie Strap



Ford Alloy Tie Strap



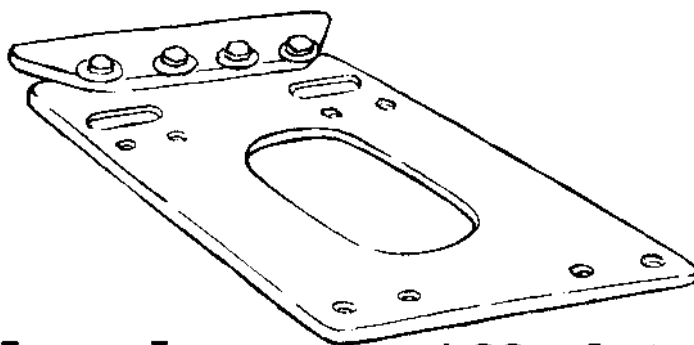
PBJ 3002

Maltese Cross

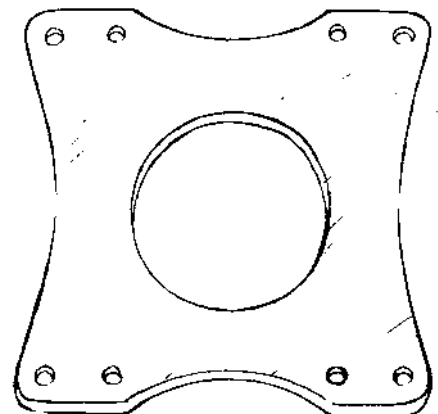
### Lower Diff Plates

See IRS Parts 1 for a description for these parts.

- |                 |                                      |
|-----------------|--------------------------------------|
| <b>PBJ 4110</b> | S/st. Short lower diff plate         |
| <b>PBJ 4111</b> | M/st Short lower diff plate          |
| <b>PBJ 4113</b> | M/st Long plate and chassis bracket. |



Long Lower Diff Plate



Lower Diff plate

**Tech Tip;** If you have to narrow a Jaguar IRS, I would recommend you use an XJ series unit as the parts are much easier to find, cheaper & have design advantages.

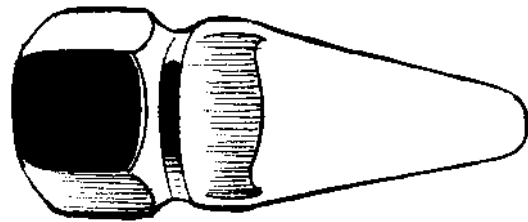
## Jaguar IRS Parts 4

### Pike & Acorn Nuts

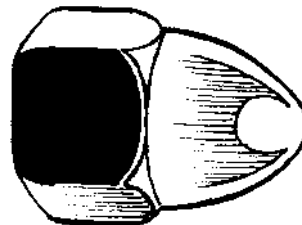
Manufactured from stainless steel for long life, our Pike & Acorn nuts add that final touch of sparkle to a Jaguar rear suspension. We can supply stainless steel spring and plain washers to go with them.

### Stainless Steel Pike Nuts for Jaguar I.R.S

PBJ 4010	7/16" U.N.F
PBJ 4011	1/2" U.N.F
PBJ 4012	5/8" U.N.F



PIKE NUT



ACORN NUT

### Stainless Steel Acorn Nuts for Jaguar I.R.S

PBJ 4020	7/16" U.N.F
PBJ 4021	1/2" U.N.F
PBJ 4022	5/8" U.N.F

JAGUAR  
DIFF  
COVER



### Stainless Steel Spring & Plain Washers for Pike & Acorn Nuts

PBJ 4030	7/16" Spring Washer
PBJ 4031	7/16" Plain Washer
PBJ 4032	1/2" Spring Washer
PBJ 4033	1/2" Plain Washer
PBJ 4034	5/8" Spring Washer
PBJ 4035	5/8" Plain Washer

### Jaguar Diff. Cover

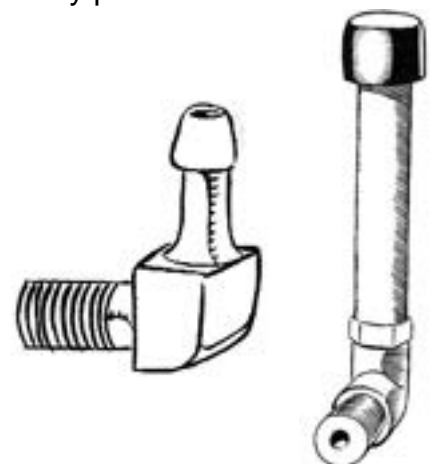
Finned aluminium differential cover, with increased oil capacity and internal baffling on the breather. Two choices of finish, either the edges and fins polished, allowing the remainder to be painted, or fully polished.

PBJ 1010	Edges & fins only polished
PBJ 1010/P	Fully polished

### Level Plug

Blue anodised oil level plug to suit the above cover. It also fits our Volvo differential cover.

PBJ 1101	3/4" NPT Level Plug
PBJ 1100	Paper Gasket for diff cover.
PBJ 1102	Polished standard breather.
PBP 2182/A	90° breather for rubber tube.

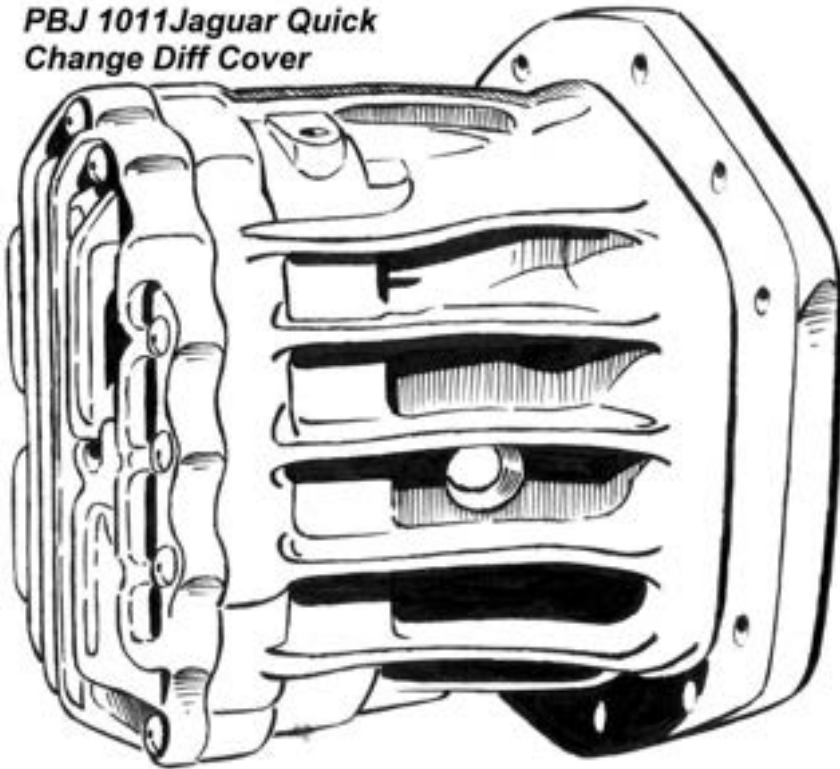


PBJ 1102

**Tech Tip:** Don't forget that limited slip Jaguar differentials require a special oil to prevent the clutch plates burning out. Normal oil will destroy the diff. We hold stocks of the correct oil.

## Jaguar IRS Parts 5

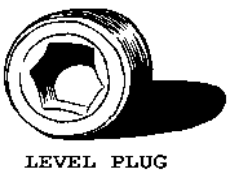
**PBJ 1011 Jaguar Quick  
Change Diff Cover**



### Quick Change Cover

Our diff cover is cast in aluminium and all gasket surfaces are fully machined. A oil filler hole is tapped for a 1/8" NPT and a 1/8" NPT breather. Stainless steel button headed bolts are use to secure the rear cover, and a standard Jaguar pattern diff gasket will seal the unit to your differential. This cover will fit both the solid Mk 2 axle and the independent units up to the Series 3 IRS.

Three finishes are available, as cast for you to finish yourself. Polished highlights with ribs and edges and fully polished. This finish is to special order and can be taken to various stages.



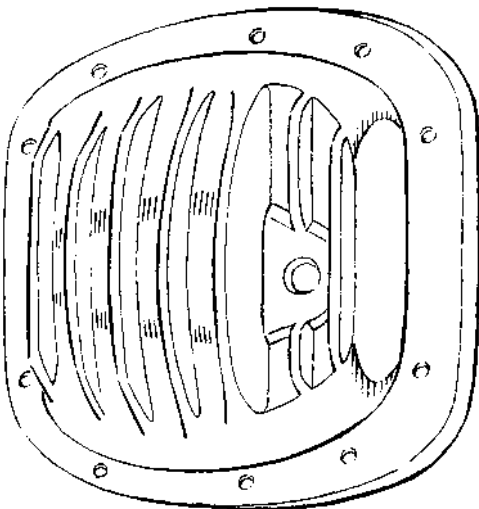
LEVEL PLUG

**PBJ 1010**  
**PBJ 1010**  
**PBJ 1010**  
**PBV 1004**  
**PBP 2182/A**  
**PBJ 1100**

Quick Change Diff Cover, as cast  
Quick Change Diff Cover, polished high lights  
Quick Change Diff Cover, fully polished  
3/8" NPT Blue Anodised alloy level plug  
1/8" NPT 90° Fuel connector for breather tube  
Gasket for diff cover to diff assembly

### Volvo & Capri Diff Covers

**VOLVO DIFF COVER**



An aluminium diff cover with polished fins & highlights to fit the popular Volvo rear axle. Another version is fully polished & we can supply a stainless steel cap headed bolt kit to secure it. Please note some axles use a UNC thread and others are metric. We have an identical cover to this, but drilled to fit the Ford Capri/Cortina axles, again both finishes are available.

**PBV 1001** Finned Alloy Diff Cover  
**PBV 1002** Fully Polished Finned Alloy Diff Cover  
**PBJ 1101** Blue Anodised Oil Level Plug  
**PBV 1005** Ford Capri Finned Alloy Diff Cover  
**PBV 1006** Fully Polished Finned Alloy Diff Cover  
**PBJ 1004** Stainless Steel UNC Cap Head Bolt Kit  
**PBJ 1004/M** Metric S/Steel Cap Head Bolt Kit

**Tech Tip:** Use PTFE tape on the threads of the filler plug & breather.

## Throttle Pedal Parts.

### Throttle Pedal

We stock two versions of this throttle pedal, which is loosely based on the Ford Model A part. A splined shaft joins the cable arm to the foot pedal, allowing a wide variety of angles and a Poly bearing is fitted for long life. Three 4.7mm holes in the cable arm give a choice of ratios from 1.65:1 to 1.3:1 and could easily be drilled to provide others. A two-hole bracket is used to attach the pedal to either the firewall or floor. A choice of pad is available, either a plain pad **PBT 0020** or a removable round rubber pad **PBT 0025**. Both pedals are polished stainless steel. A stick on chequered rubber pad **PBT 0020/P** can be added to **PBT 0020**.

### Throttle cables.

#### Universal Throttle Cable

This cable **PBT 0021/L** has a braided stainless steel outer and inner cable with one free end to allow for trimming. With high tech. stainless adjusters at either end and a removable ball joint make for easy carburettor connection. The pedal end has a clevis assembly, ideal for use with **PBT 0020** or **PBT 0025**. The outer cable has a length of 36" from stop to stop; full instructions are supplied on trimming. We also stock an identical cable **PBT 0021/B** but with a black outer covering.

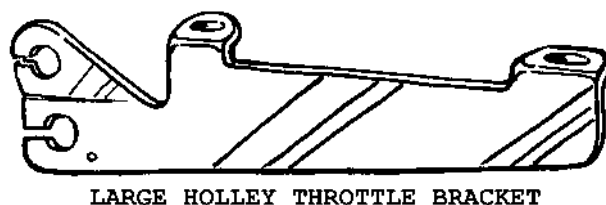
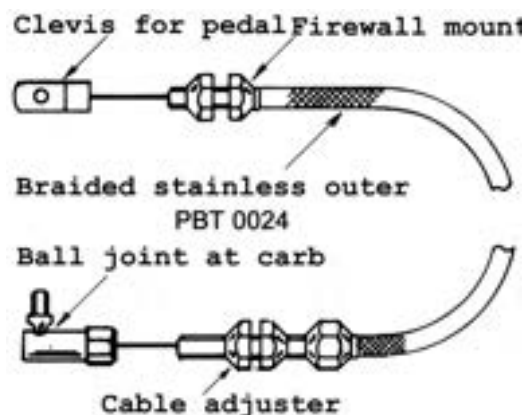
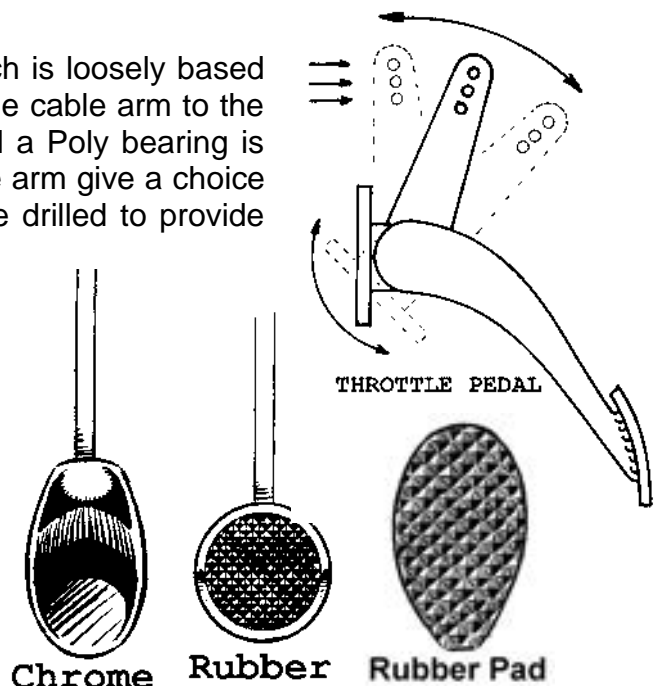
Our heavy duty throttle spring **PBT 0024** is finished in black with a swivel hook at either end. This is Ideal for any application where a heavy-duty return spring is required. Installed length = 60mm.

We also stock an American stainless steel twin return spring **PBT 0035**. This one works well and produces a lighter feel.

#### Holley Carburettor Bracket

Made from laser cut polished stainless steel, the bracket uses the two-rear carburettor studs and suits the 390 and 600 cfm vacuum secondary models as well as other four barrel carburettor. Holes are provided for both throttle and kick down cables, as well as a hole for a throttle return spring. It is designed to work with our throttle pedals & return spring.

**PBT 0022** Large Holley bracket  
**PBT 0035** S/st twin throttle spring  
**PBT 0024** Heavy duty throttle spring



**Tech Tip:** When setting up throttle linkages make your final task to check that you are getting full throttle at the carburettor. It is easiest to remove the air cleaner and check the throttle plate.



## Fuel Systems

### Fuel Regulator

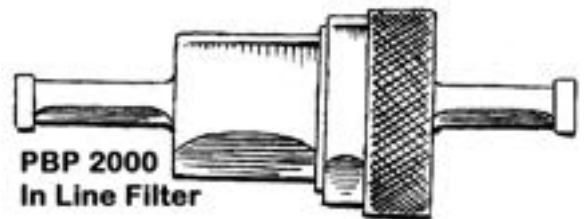
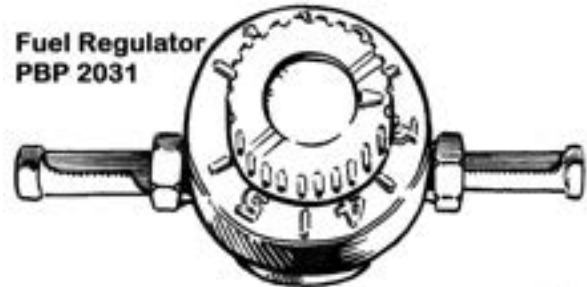
A lot of carburettors do not need and cannot handle high fuel pump pressures. Our fuel regulator, **PBP 2031**, reduces the pump pressure down to a range of 5 pounds maximum to 0 minimum. A ribbed, top mounted knob is rotated to adjust the pressure. Although supplied with 5/16" x 1/8" NPTF fuel line fittings, we can supply 1/4" (**PBP 2181**) or 3/8" (**PBP 2103**) fittings if you are using those fuel line sizes.

### Fuel Filters



The chrome and glass filter, **PBP 2021**, has been around for a long time. It's easy to strip. Just unscrew the chrome plated ends to get to the plastic gauze filter element. The stems are 5/16" (8-mm), though other sizes are available.

This in-line filter, **PBP 2000**, comes in a number of finishes. The body being 33-mm long and 28-mm max. diameter with 8-mm stems will fit in anywhere. One end unscrews to reveal an everlasting sintered bronze cleanable filter element



Fuel filter, **PBP 2185**, is a small unit designed to screw into a fuel pump or carburettor. One end has a 1/8" NPTF thread and the other an 8-mm stem. We also stock **PBP 2185/S**, a similar unit but with a larger 40-mm diameter for increased capacity.



The chassis mounted filter, **PBP 2100**, is really neat, being scaled down to suit English vehicles. The head of the unit is cast alloy and the bowl is anodised red alloy. Two bleed screws are fitted and the ports are threaded 1/4" NPTF accepting our fuel fittings **PBP 2191 to 2194**. Two mounting 8-mm holes on 23.9-mm centres are built into the top casting. The assembly measures 93-mm high, 80-mm wide and 52-mm deep. Spare filter elements, **PBP 2100/F**, and sealing rings, **PBP 2100/S**, are available.

### Fuel Fittings

- PBP 2191** 1/4" NPTF with 5/16"Ø stem con, for red top pump.
- PBP 2192** 1/4" NPTF with 5/16"Ø 90° stems connector.
- PBP 2193** 1/4" NPTF with 3/8" Ø 90° stem connector.
- PBP 2194** 1/4" NPTF with 3/8" straight stem connector.



**Tech Tip:** Good filtration is vital to ensure reliable carburetion, a quality filter as close to the fuel tank as possible prevents dirt getting into the system.

## Fuel Pumps & Fittings

### Fuel Pumps

We stock two large 12 volt fuel pumps, a red top, silver top, **PBP 2190/S**. The red top is the more powerful with a pressure of 6.0 to 8.0 pounds per square inch, with a capacity of 40 gallons per hour. It has a pair of large 1/4" NPTF threaded ports and should be fitted upright to make sure that air is bled out easily. The pump is suitable for up to 200 horse power. The silver top version is identical, but for 1/8" NPTF ports, delivers 4.0 to 5.5 P.S.I at 30 gallons per hour and is suitable for up to 150 horse power. If you are using the red top with some carburettors you will need to fit our fuel regulator, **PBE 2031**, as most American carburettors work best with between 2 and 4 lbs of fuel pressure.

Our small "cube" pump, **PBP 2180**, uses the same small 1/8" NPTF unions as the silver top. The pressure is 3.0 to 4.5 PSI with an output of 30 gallons per hour and is suitable for 130 horse power.

We stock a rubber mounting kit, **PBP 2186**, consisting of two rubber cotton reels with bonded studs and a large earth strap. It provides insulation to prevent the pump vibrating and transmitting noise to the chassis.



**Fuel Filter  
PBP 2185**

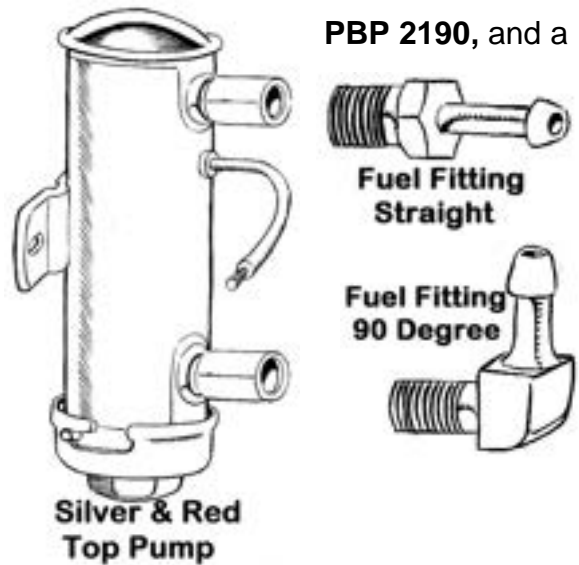


**Saudi Filter  
PBP 2185/S**

The fuel filter, **PBP 2185**, screws into the pump, **PBP 2180**, as it has a 1/8" NPTF thread at one end, and an 5/16" (8-mm) stem at the other. It will fit some American **Ford Autolite** carburettors. Another version, **PBP 2180/S**, known as a Saudi filter, is a larger version with the same fittings.

- PBP 2181**      1/8" NPTF x 1/4"Ø stem connector.
- PBP 2182**      1/8" NPTF with 5/16" Ø stem fuel connector.
- PBP 2182/A**    1/8" NPTF with 5/16"Ø 90° stem fuel connector.
- PBP 2183**      1/8" NPTF with 3/8"Ø stem fuel connector.
- PBP 2185**      Screw in fuel filter for the "Cube" pump.
- PBP 2185/S**    Heavy duty (Saudi) version of above filter.
- PBP 2186**      Rubber mounting kit, 2 bobbins + earth strap .

See price list for full range of related fittings

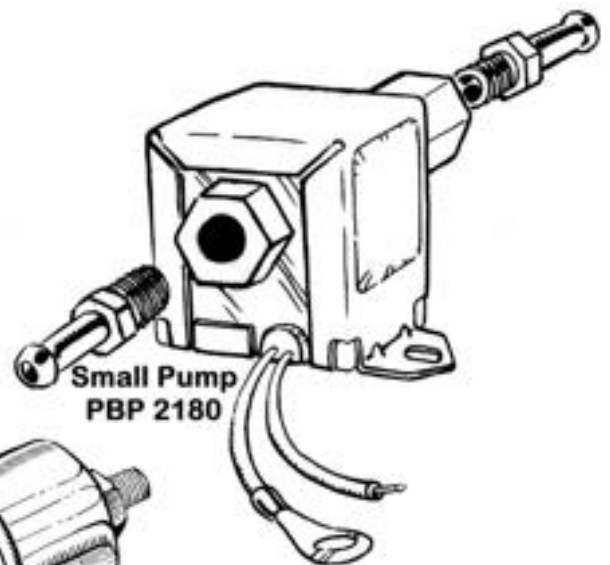


**Silver & Red  
Top Pump**

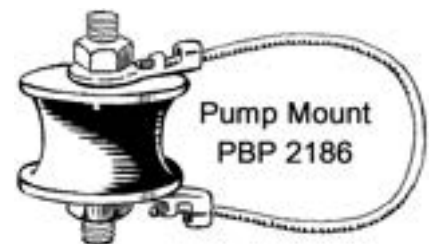
**PBP 2190**, and a

**Fuel Fitting  
Straight**

**Fuel Fitting  
90 Degree**



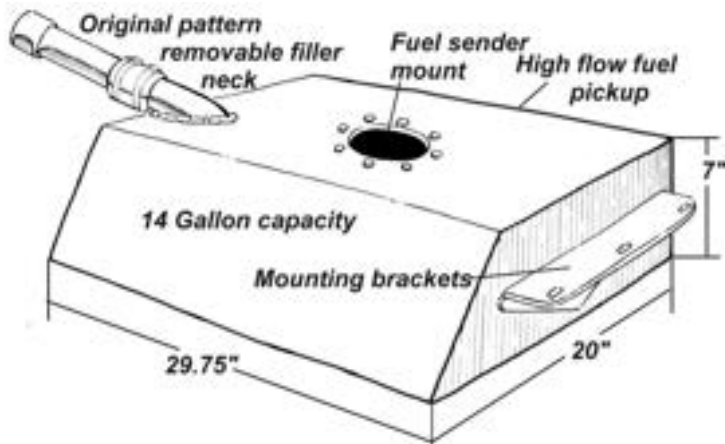
**Small Pump  
PBP 2180**



**Pump Mount  
PBP 2186**

**Tech Tip:** Some fuel pumps have high current loads, use 28/030 or equivalent cable for the feed & earth wires

## Popular/Anglia & Prefect Replacement Fuel Tank



Our replacement fuel tank **PBP4100** overcomes a number of problems associated with the standard fuel tank. Our version has a much larger fuel pickup pipe and provision for a modern fuel gauge sender. The increased capacity, 14 gallons, increases the vehicle range by 230% compared to the original tank area on the Popular. The tank uses the standard mountings in the chassis with extra mounting holes provided to help support the extra fuel load. Full baffling and a drain plug are

fitted should you need to remove or clean the tank. A large access hole and different plates allow the fitting of fuel return pipes, different gauge sender units and fuel injection bumps in the top. We fit a removable filler neck with silicon hose plus clips, as it allows easier fitting of the tank & adjustments to accommodate slight body variations. Standard filler caps will fit the neck. Stainless steel bolts, nut blocks and rubber Insulating strips are provided in a fitting kit.

**PBP 4100** Popular, Anglia or Prefect replacement 14-gallon tank

**PBP 4109** Large ring gasket for top access hole.

**PBP 4110** Tank fitting kit, nuts, bolts filler neck + connecting hose

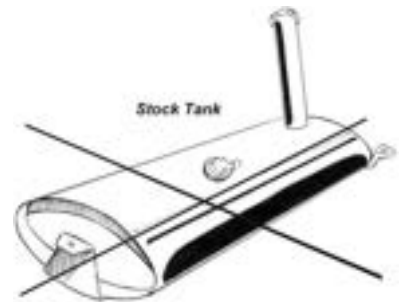
**PBP 4111** Silicone tubing 2.5" x 3" long

**PBP 4112** Tank plate for 5 hole fuel gauge sender unit + bolts

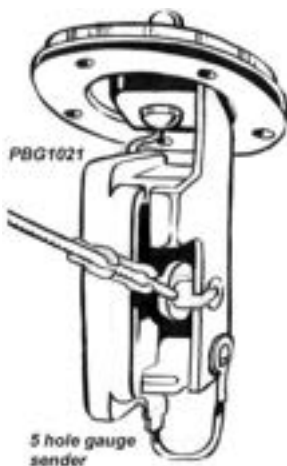
**PBP 4114** Tank plate for 6 hole fuel gauge sender unit + bolts

**PBP 4116** Tank plate plain for unusual senders or pickups

**PBP 4120** Large ring gasket for all the above



### Fuel Connectors.



Our connector **PBP 3008** which is a brass 90° 3/8 BSP male with a 5/16" (8-mm) stem or **PBP 3009** with a 3/8" 910-mm) stem work well with the tank. Removing the stem allows solid line to be connected directly to the fittings if so desired. Other connectors are available for various hose sizes in both 1/8" NPTF and 1/4" NPTF, see our price list.



### Fuel Sender Unit

The five-hole sender unit **PBG 1021** has a resistance range of 240Ω (empty) to 33Ω (full), which suits a large range of English or American fuel gauges. We also stock a six hole sender **PBG 1010**, top mount and **PBG 1010/S** side mount matching most English gauges.

### Filler Caps



Polished st/st plain cap

One of our ranges of caps to fit the replacement tank as well as most Fords from 1932 to 1980 is **PBP 3014** a polished stainless steel cap. We also have a locking fuel cap **PBP 3007**, made in



polished stainless steel with two keys.

Don't forget the fuel tank sender unit has to match your fuel gauge. If you need help matching the two please phone us on our low cost number **0844 544 0960**.

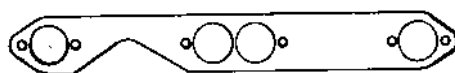
## Exhaust 1

### Small Block Chevrolet 265/400

Precision made one-piece exhaust flange in 6mm, complete with clearance for water temperature transmitter, in mild or stainless steel.

**PEP 0010/M** Small Exhaust Flange/Mild Steel

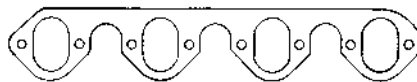
**PEP 0010/S** Small Exhaust Flange/Stainless Steel



**PEP 0010**

### Big Block Ford

Designed for the 427 and 460cu inch engines, these flanges have oversize oval ports to allow either, oversize primary tubes, or alternately, allows the tube to be passed through the 6mm flange and then welded on the head side.



**PEP 0014/M** Large Exhaust Flange/Mild Steel

**PEP 0014/S** Large Exhaust Flange/Stainless Steel

### Small Block Ford 260/351

Header flange in 6mm mild or stainless steel - sold in pairs.

**PEP 0011/M** Small Header Flange/Mild Steel

**PEP 0011/S** Small Header Flange/Stainless Steel



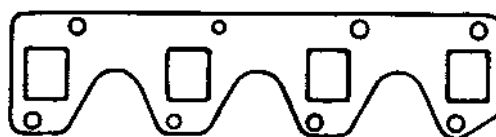
**PEP 0011**

### Ford OHC Pinto

Suits the 1600 or 2000cc overhead cam Ford engines. This flange is available in 6mm mild or stainless steel. Note: enlarged ports to allow the primary pipes to be welded inside.

**PEP 0015/M** Header Flange/Mild Steel

**PEP 0015/S** Header Flange/Stainless Steel

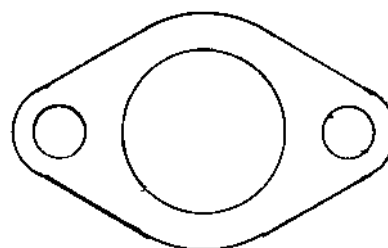


### Side Valve Ford V8

This flange suits the early 21 stud and later 24-stud side valve V8's and also fits the standard Ford cast iron manifold front pipe flange. Available in 6mm mild and stainless steel.

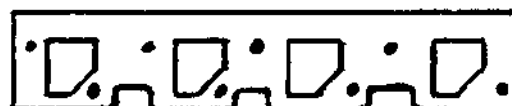
**PEP 0016/M** Header Flange/Mild Steel

**PEP 0016/S** Header Flange/Stainless Steel



### Big Block Ford

This flange is rumoured to fit certain large Ford V8 engines. We believe it is suitable for the 351 with 4 V heads, but we strongly suggest you send us a paper template before ordering these flanges, as they do not appear to fit every engine. Note: they will accept 2" primaries.



**PEP 0012/M** Header Flange/Mild Steel pair

**PEP 0012/S** Header Flange/ Stainless Steel pair

**Tech Tip;** A small amount of oil squirted down the primary pipes of your headers, can apparently reduce the risk of 'blueing' when you fire up your engine for the first time.

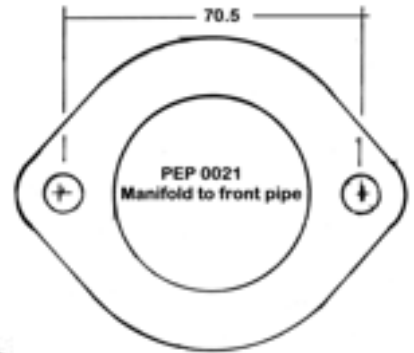
## Exhaust Flanges 2

### Ford V6



PEP 0020

This laser cut flange for Ford V6 3.0 or V4, **PEP 0020**, is available in 6mm mild or stainless steel. They are different than the later 2.8 and 2.9 V6 engines. We also stock **PEP 0021** which is a flange machined to fit onto the standard 3 litre Ford V6 manifold. This simplifies attaching an exhaust front pipe if you are repairing or replacing it.

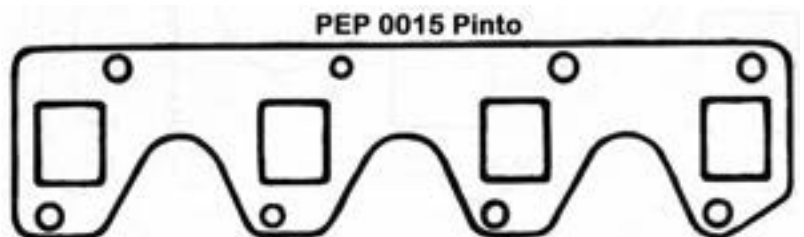


### Ford Cross Flow

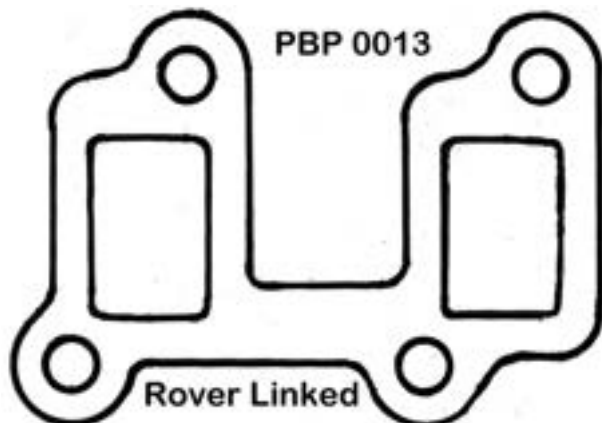
Our Ford cross flow flanges are available in 6mm mild **PEP 0050/M** or stainless steel **PEP 0050/S**. They are sold in a set of three.

### Ford Pinto

The Pinto flanges are available in 6-mm stainless **PEP 0015/S** or mild steel **PEP 0015/M** and being one piece simplifies the job of making manifolds.



### Rover Header Flange



We stock two flanges, one in 8-mm stainless steel **PEP 0013/SL** and one in 8-mm mild steel **PEP 0013/ML**. Both are designed to accept a 1.5" primary pipe with the choice of welding on the cylinder head side of the flange or larger pipes can be butted to the outside. They are sold in sets of four. We produce a set of four special linked gaskets **PEP0013/LG** in a modern asbestos free gasket material. We have a few sets of the older single flanges in stainless steel **PEP 0013/S**, mild steel **PEP 0013/M** and the individual gaskets **PBP0006** while stocks last.

### General exhaust parts

**PBP 1009** Set of sixteen stainless steel cap head header bolts, 3/8"UNC x 1". They can be used on both Rover and Ford exhaust manifolds. This size will fit a lot of other engines; to this end we can supply different quantities for different engines.



**Tech Tip:** Most of our flanges have slightly oversize ports for the primary pipe to pass though allowing welding on the inside of the flange.

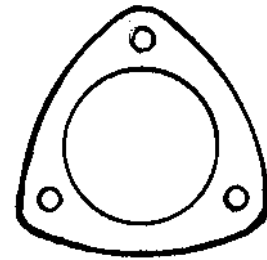


## Exhaust Parts 3

### Triangular flanges

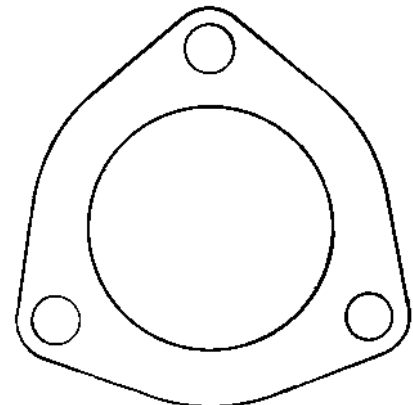
We produce a large range of triangular exhaust flanges & gaskets. They are very useful for joints in exhaust systems, having the advantage over slip joints of allowing parts of the system out without having to remove adjacent pieces. The small 1.75" flanges can be used for balance pipes between twin systems or will fit the standard Rover cast Iron exhaust manifold. We also produce a small version of our 2" flange for use in tight situations. All flanges are available in both stainless steel & mild steel & we have gaskets in asbestos free material & some sizes in copper. A set of three stainless steel button head bolts & nuts are available for jointing the flanges together. We can supply hexagonal headed bolts instead of the button heads, if preferred

- PEP 1000** 1.75" ID 6mm small mild steel flange.
- PEP 1000/S** 1.75" ID x 6mm small stainless steel flange.
- PEP 1000/G** 1.75" Small gasket.
- PEP 1010** 2" ID x 6mm small mild steel flange.
- PEP 1010/S** 2" ID x 6mm small stainless steel flange.
- PEP 1010/G** 2" ID Small asbestos free gasket.
- PEP 1020** 2" ID Large 6mm mild steel flange.



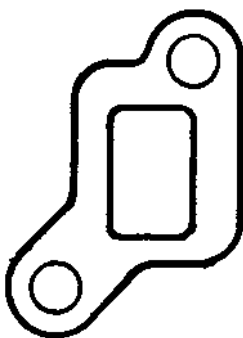
Small Flange

- PEP 1020/S** 2" ID Large 6mm stainless steel flange.
- PEP 1020/G** 2" ID Large gasket.
- PEP 1030** 2.375" ID x 6mm mild steel flange.
- PEP 1030/S** 2.375" ID x 6mm stainless steel flange.
- PEP 1030/G** 2.375" ID asbestos free gasket.
- PEP 1040** 2.5" ID x 6mm mild steel flange.
- PEP 1040/S** 2.5" ID x 6mm stainless steel flange
- PEP 1040/G** 2.5" ID gasket
- PEP 1050** 3" ID x 6mm mild steel flange.
- PEP 1050/S** 3" ID x 6mm stainless steel flange.
- PEP 1050/G** 3" ID gasket.
- PEP 1200** Set of 3 St/st button head bolts & nuts.
- PEP 1220** Set of 3 St/st hexagonal head bolts & nuts.



Large Flange

### Rover Header Flange



**PEP 0013**

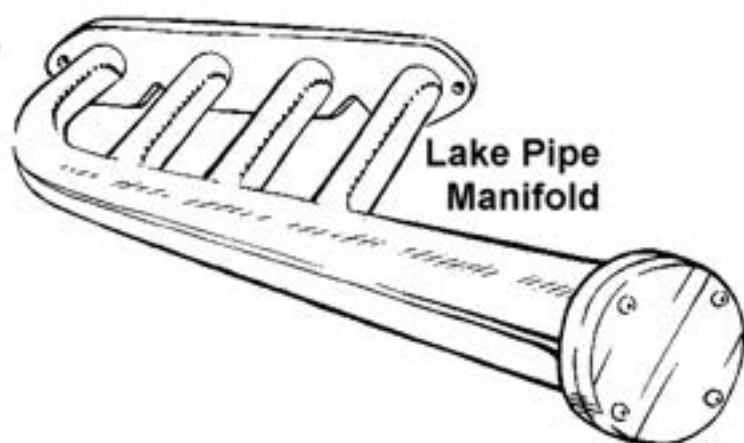
We stock two flanges, one in 6mm stainless steel and one in 8mm mild steel. Both are designed to accept a 1.5" primary pipe with the welding on the cylinder head side of the flange. Larger pipes can be butted to the outside. You will need eight per set.

- |                   |   |
|-------------------|---|
| <b>PEP 0013/M</b> | 8mm mild steel flange                         |
| <b>PEP 0013/S</b> | 6mm stainless steel flange                    |
| <b>PBP 1006</b>   | Set of eight exhaust gaskets                  |
| <b>PBP 1009</b>   | Set of sixteen St/Steel cap head header bolts |
| <b>PBP 1014/M</b> | One piece M/st exhaust flange, pair.          |
| <b>PBP 0014/S</b> | One piece St/st exhaust flange, pair.         |



**Tech Tip;** A dab of Copper grease on the bolts used with your exhaust flanges will make removal much easier, especially if you are using stainless steel bolts & nuts.

## Lake Pipes & Parts



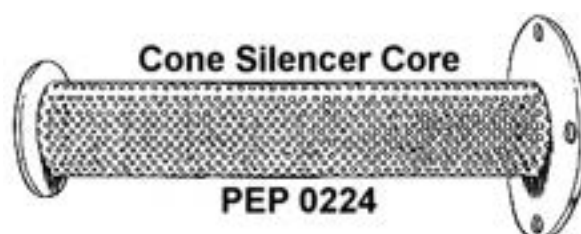
### Lake Pipes

This type of exhaust has been about for years and is attractive as it is simple and can be self contained. We carry a full line of parts for you to produce your own in both stainless steel and mild steel. We also supply an internal silencer system as well as a hook up for an under floor system in the traditional fashion. The internal silencer core **PBP 0224** has is made in stainless steel. The end cap is

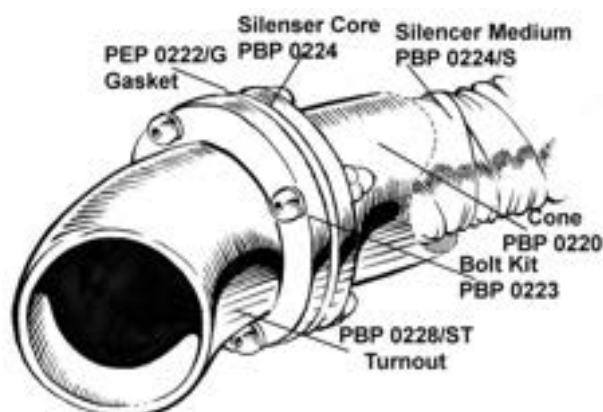
polished so that it can be used with either a polished retainer ring **PBP 0222** or a fully polished turnout **PBP 0228/ST**. A perforated tube is TIG welded to the end cap and has a retaining ring on the opposite end. We can supply a silencer medium, **PBP 0224/S**, which is packed tightly round the silencer core, held in place by stainless steel wire.

If you decide on an under floor silencer system a short 2" pipe **PBP 0226**, can be added to the open end of the cone and connected via one of our 2" triangular flanges **PEP 1010**. Our cones are specially made in stainless steel

**PBP 0220/S** and mild steel **PBP 0220**; they are 26" long by 1.625 at the small end and 3.5"



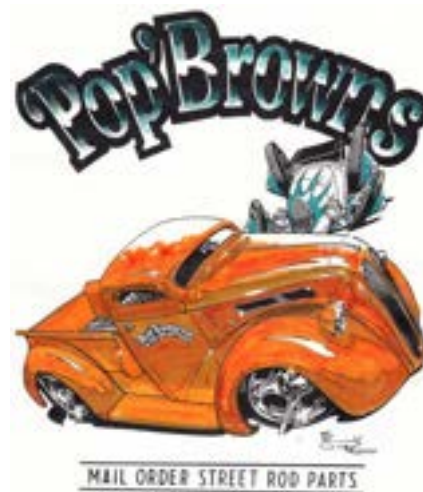
at the large end. We stock a series of 75° bends in mild and stainless steel from 1.5" **PBP 0231** diameter to 2" **PBP 0234**; just add **S** to the number for stainless steel bends.



Our polished stainless steel turnouts **PBP 0228/ST** are welded to four hole rings and then highly polished ready to a matching ring on either the mild or stainless steel cones. We have had specially made gaskets **PBP 0222/G** for the cone rings as well as a kit of stainless steel button head bolts **PBP 0223** for a set of four.

- PBP 0220** Mild steel cone, 26" x 1.625" x 3.5" cone.
- PBP 0221** Mild steel exhaust cone end caps, four hole
- PBP 0222** Mild steel exhaust cone end ring, four hole
- PBP 0222/G** Special Novus gasket for the above rings
- PBP 0223** St/steel button headed bolt & nut kit for rings
- PBP 0224** St/steel inner silencer core for cones.
- PBP 0226** M/st exhaust cone outlet pipe 2" x 6"
- PBP 0228/ST** Polished s/st 45° turn out & ring for cone.
- PBP 0231** M/steel exhaust bend 75° x 1.5"Ø.
- PBP 0232** M/steel exhaust bend 75° x 1.625"Ø.
- PBP 0233** M/steel exhaust bend 75° x 1.75"Ø.
- PBP 0234** M/steel exhaust bend 75° x 2"Ø.

stainless steel bends just add /S to the part number.



**Tech Tip:** I have been told that spraying oil into the manifold before starting the first time will help reduce "bluing" in polished finishes.

## Steering Column and Drops

### Steering Columns



Our column, **PBW 0100**, uses a polished stainless steel outer tube 44.45mm [1.75"] in diameter, with a 1.5mm [0.06"] wall thickness for high strength. Alloy end bosses provide support for a pair of special thermoplastic bearings, which are designed to require minimal lubrication. The inner shaft, used to mount the steering wheel hub, is machined from mild steel with an early Ford or Volkswagen taper and key, and has a 9/16"Ø x 36 spline on the other end. We stock various lengths and can produce special ones to order. The 9/16" spline is used on several English makes such as Vauxhall, Leyland and Ford. Our universal joint, **PSW 0200**, works well, see the price list for all the options. We also produce a version, **PSW 0100/I**, fitted with our **PBC 1500/G** indicator switch. A special inner lining for the column protects the hidden wiring, which exits under the dash board area and the switch is attached to the outer tube with secret fixings.

**PSW 0100**    Polished stainless steel steering column

**PSW 0100/I**    Polished stainless steel steering column for indicator switch

### Steering Column Drops

Made from polished stainless steel, these column drops are an ideal way to mount our steering columns. They come complete with a pair of mild steel tags that can be welded to your car, and are long enough to give an extra 25mm of adjustment in any direction. They are attached to the top bar of the drop by a pair of polished stainless steel button head bolts. The column passes through a collar, which has a stainless steel securing grub screw in it. We stock three lengths 2", 4" and 6", but can produce others to order, and they are measured from the centre of the top bar to the centre of the collar. The 2" drop is ideal for Model T's and other cars with a lack of room in the cockpit.

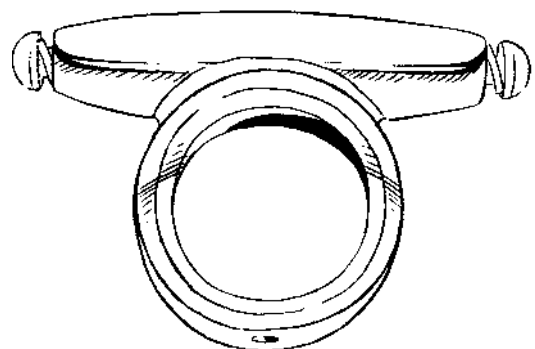
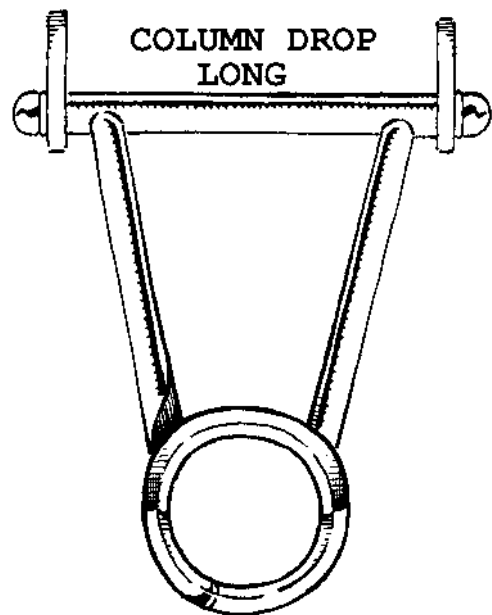
**PSW 0210**    2" Polished Column Drop

**PSW 0210**    4" Polished Column Drop

**PSW 0211**    6" Polished Column Drop

### Splined Shafts

Our range of splined shafts is designed for use with the **PSW 0100** steering column. Shafts are machined from stainless steel in 16mm [5/8"]. The stainless steel shafts, **PSW 0229**, to, **PSW 0236/X**, are not polished. See the current price list for the full range of lengths.



**PSW 0208 2" DROP**

**Tech Tip:** When fitting more than 1 steering UJ, be sure to "phase" them. Phasing prevents a notchy feeling & extends the life of the joints. Please ring if you need an explanation

## Steering Wheels & Hubs

### Sprint Steering Wheels

We tried to catch the flavour of the sprint car steering wheels and hot rods racing on the circle tracks and dry lakes of California in the Forties and Fifty's. The three spoke version is based on the famous "Bell Auto" wheel, **PSW 0013**, and the four spoke, **PSW 0010**, similar to Cragar's item. Our normal rim measures 14", measured in the English way from centre to centre diametrically. Special 16" rim models are available to order but require a lot of cockpit



space. All rims are bare steel and powder coating is the easiest covering. I have seen some bound in string, very effective and used in some older racing cars which can be dyed after binding. The centre, or spider, is polished laser cut stainless with a six-hole bolt retaining system and a central register hole. The mounting bolts can be either



countersunk to clear a medium size centre cap, **PSW 0020/M**, or button head if using the small cap, **PSW 0020**. All our caps are held on using a rubber "O" ring, which is a tight fit in the centre hole of our Sprint hub, **PSW 0023**. We also carry adapters, **PSW 0030**, which bolt onto Mountney hubs.

### Steering Wheel Hubs

Our polished alloy hub Sprint hub, **PSW 0023**, has a central hole to suit our wheels. The tapered keyed fitting, suits our steering columns, **PSW 0100**, and will fit VW micro bus and early Ford columns. A raised central register suits our wheels and an extended skirt covers the top of the column for a seamless look and a set of stainless steel fixing bolts are included.



### Hub Centre Caps

Our centre caps are the finishing touch to a Sprint wheel. The small **PSW 0020** takes its origins from the early steering wheel centre caps and leaves the fixing bolts exposed. The other medium sized cap, **PSW 0020/M**, covers the fixing bolts, requiring them to be counter sunk. A machined depression in the centre can have a badge glued in or could be engraved.

We stock or manufacture hubs to suit our steering columns. Versions are produced for Mountney wheels with small, **PSW 0024/S**, or large, **PSW 0024**, central holes. A very popular hub, **PSW 0025**, has a three bolt pattern and central register for Grant steering wheels. All are produced in billet alloy and have stainless steel fixings supplied. Centre caps can be supplied for the Mountney hubs but you should use the Grant cap and retaining horn with the **PSW 0025** hub.



**Tech Tip:** The height of key on our steering columns needs to be shaved to suit our hubs. We will happy do this for you before dispatch.



## Steering Column Parts

### Lower Steering Column Support

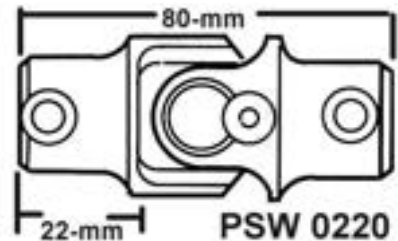
This lower steering column mount, **PSW 0212**, is an ideal way to support your steering column. Machined from aluminium and then polished, it comes complete with stainless steel button head bolts and nylock nuts. A stainless steel grub screw locks the angle of the inner ball and tightens it on to your column. Though set up for 1.75" diameter columns we can produce inner sleeves to fit smaller units.



### Universal Steering Joints

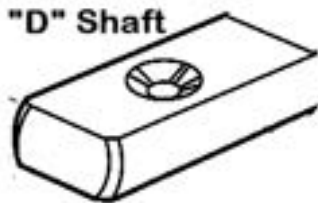
We stock an English made steering U.J. part number, **PSW 0200**, which has a 9/16" x 36 spline. This is a high quality joint and is much better than some of the imported joints on sale. Other sizes can be supplied by

special order. Special button head stainless steel bolts and nylock nuts, **PSW 0200/B**, are sold in pairs.



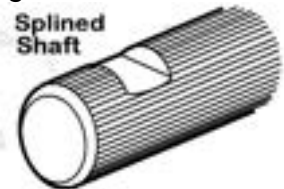
We also carry American Borgeson steering joints in the following sizes, 9/16" x 36 x 2, (**PSW 0220**), 9/16" x 36 to 5/8" x 36, (**PSW 0221**), 9/16" x 3" DD, (**PSW 0224**).

Some are available in stainless steel, just add **/S** to the part number. The Double D (DD) shaft system is handy as the connecting links are simply 3/4" or 1" diameter bars with two opposing flats machined on. We have 3/4" D D shafts in 36" lengths. Our suppliers recommend that the shafts should be "Spot Drilled" on final assemble to receive the grub screws used in their UJ's.



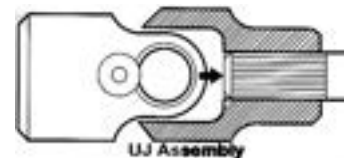
### Splined Shafts

We produce our own 9/16" x 36 splined steering shafts. They are produced in stainless steel with the a few exceptions where welding may be required. We have a range of sizes from 2" - **PSW 0225** to **PSW 0236/X** - 20" to 30" in 2" steps. The splined area is long enough to be trimmed down by 1/2" per end to make up the odd lengths.



### Tech Tips

When assembling steering shafts & universal joints, ensure that the end of the shaft is level with the inside of the joint, as per illustration. Having the shaft too far in could jam the joint. The Universal joints need to be "phased", if your steering feels "notchy" this could be the cause. If you would like an explanation of this practise, phone us on **0844 544 0960**. The angle of the U.J. should not exceed 30 degrees. The greater the



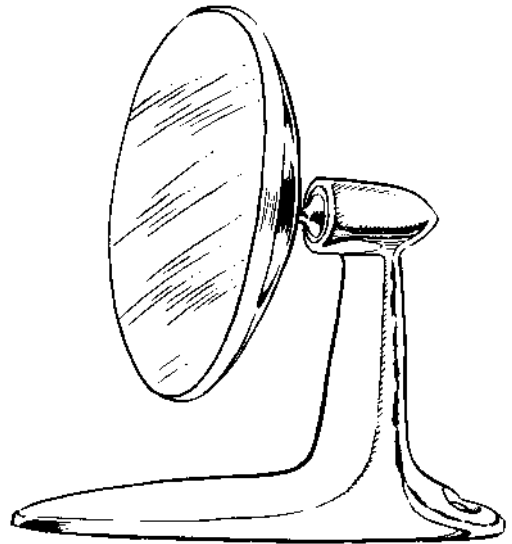
angle the more likely it is to wear out. Try to keep steering UJ's away from exhaust heat. Avoid welding U.J joints to steering rods, it can melt out the lubricant. Also at some point you **WILL** need to change it and welding just complicates the job.



## Mirrors 1

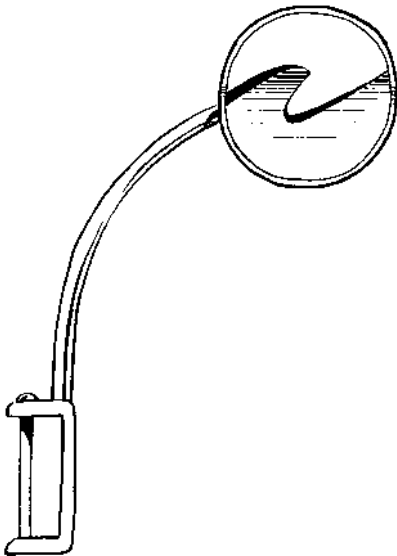
### 4" Wing Mirror

This mirror **PBH 3220** is styled to suit fifties and sixties U.S. vehicles such as Tri Chevys. With a chrome finish and 4" mirror head they are very practical as well as look good . They are fitted with two screws (not provided), one of which is hidden. We can offer suitable stainless steel self-tapping screws. A rubber gasket is included. The base measures 31mm x 160mm with the centre of the head 93mm above the base. The mirror is not handed.



### Hinge Mirror

Designed for mid 30's Fords such as Model A's and F-1 pickups, this mirror **PBH 3207** will fit Popular & Anglia hinges. The mirror arm is held via the hinge pin (not supplied) and is locked onto the hinge by two grub screws. The head is reversible, which allows you to fit the mirror on either side of the vehicle, the whole assembly is chrome plated. The head of the mirror is 175mm above the top of the hinge and 150mm out from the centre of the pin; the hinge bracket has a 57mm gap with a depth of 14mm from the pin.



### Peep Mirrors

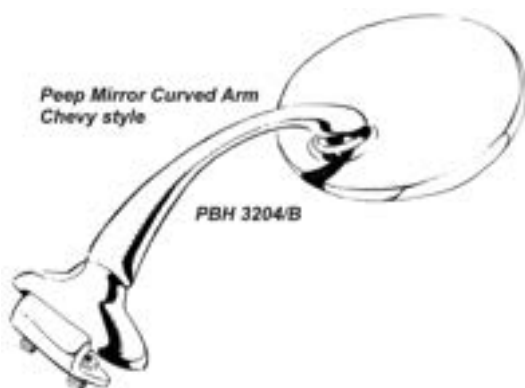
The all time favourite rear view mirror, which suits vehicles as diverse as Model A Coupes & Classic Sixties Fords. The head is polished stainless steel with a curved chrome stem and plinth. The stem is splined to the plinth allowing perfect head alignment whatever mirror angle is selected. Attachment is either by gutter clip and grub screws or single screw fitting once the clip is removed. The latter method works well on Model Y's & 34's if a hole is drilled in the door near the belt line.



**PBH 3201** 3" Chrome peep mirror

**PBH3202**

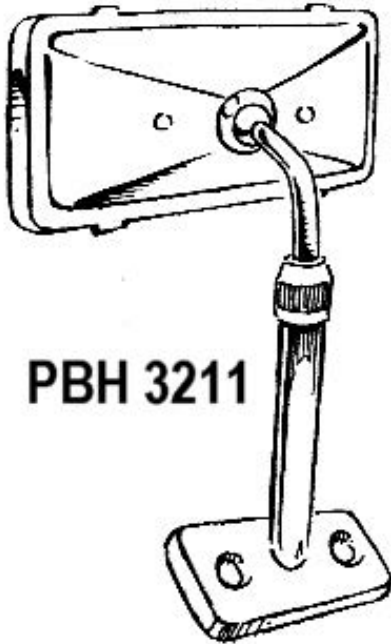
4" Chrome peep mirror



A curved-arm version of the peep mirror, **PBH 3204/B**, would work well on vans or for towing as well as Popular's, Prefect's and Anglia's. It has all the features of the curved arm peep mirrors but stands out 135mm [5.3"] from the base as opposed to 55mm [2.1"] with the curved arm. It has a chrome stem and stainless steel mirror head. They were first used on pre war Chevrolets.

**Tech Tip**; Always fit the passengers side mirror first as it is harder to site, then transfer that position to the other side.

## Interior Mirrors

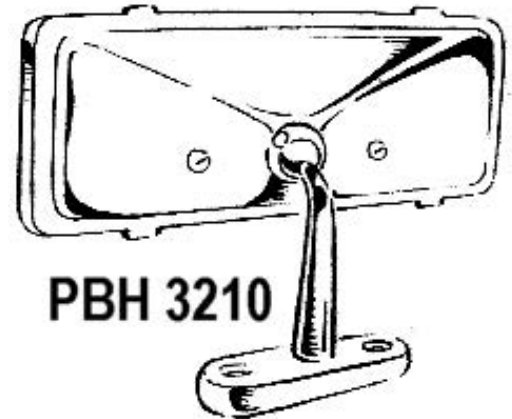


This adjustable mirror, **PBH 3211** is a good choice for any one building a "Nostalgia" rod or wanting a change from the "Billet" look. The stem has a knurled nut, which allows the head of the mirror to be raised between 100 & 150mm above the base. The stem is angled back at 72° for windscreen clearance & the base has two 6mm diameter holes on 31mm centers. The head measures 105 x 45mm & the whole assembly is finished in high quality chrome plating.

Another version, **PBH 3210**, is non-adjustable with a similar head. The stem is at 90° to the mount, which has two 6-mm holes.

**note** we can supply a pair of stainless steel button head or countersunk bolts as fixings. Due to the

unprotected heads these mirrors are unsuitable for vehicles subject to **S.V.A**

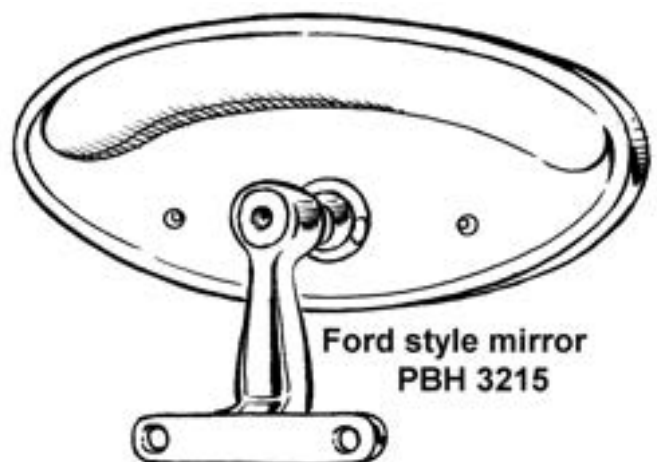


- PBH 3210** Non-adjustable chrome interior mirror.
- PBH 3211** Adjustable chrome interior mirror
- PBS 3011** S/St. 5mm countersunk bolt/nut kit for **PBH 3210**
- PBS 3012** S/St 6mm button head bolt & nut kit for **PBH3211**

## Stainless Steel Interior Mirror

This mirror, **PBH 3215**, is simply the best & the whole thing screams quality, it appears to be based on a thirties Ford design. The oval head is 145 x 72mm & is mounted 40mm from the bracket base which has a beautiful curved stem & is secured using two 6mm counter sunk bolt holes on 50mm centers.

- PBH 3215** St/St Oval interior mirror.
- PBS 3013** St/St C/s bolt & nut kit.



**Tech Tip:** Mount the passenger side mirror first. If it is in the correct position so will be the drivers side mirror

## Wheel Adaptors And Parts

### Wheel Adaptors

Manufactured from billet aluminium for strength, these wheel adaptors use high quality wheel studs. Our Volvo axle adaptors are available in two patterns. **PBV 1010** has a 5 stud Ford PCD 4.5" layout with ½" UNF studs whereas **PBV 1011** has a Jaguar/Chevrolet 4.75" PCD x 5 pattern. Other versions are listed below.

**PBV 1013** Jaguar or Chevrolet axle to American Ford wheels

**PBV 1014** Ford 5 stud axle to Chevy or Jaguar wheels

**PBA 0510** Bedford CF axle to Chevy or Jaguar wheels

**PBA 0515** Transit axle to Chevy or Jaguar wheels

**PBA 0518** 4.5" x 5 axle to 5.5" x 5 Early Ford wheels



### Wheel Nuts

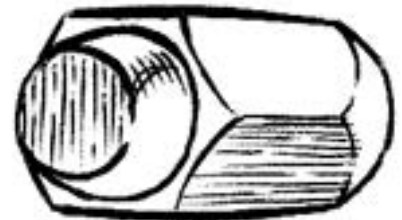


Plain wheel  
nut

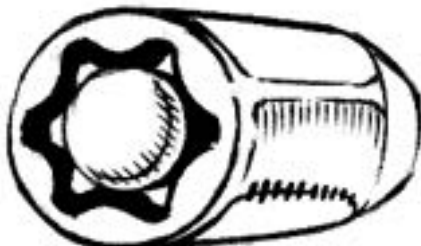
Our plain steel wheel nut, **PBV 1012**, has a ¾" spanner size and a ½" UNF thread, ideal for use with our wheel adaptors. An alternative plain steel wheel nut, **PBV 1012/A**, has a ½" UNF thread but with a 13/16" spanner size for older or larger steel wheels. A 7/16" UNF version, **PBV 1015**, also uses a ¾" spanner size.

Chrome Acorn style chrome nuts are stocked in packs of four, **PBV 1025** has a ½" UNF thread and **PBV 1027** has a 7/16"

UNF thread. A locking chrome version, **PBV 1030**, uses a clever "Labyrinth" key system and has a 1/2" UNF thread.



Chrome Acorn Nut



Locking Chrome  
Acorn

*Special wheel adaptors using two aluminium discs keyed and bolted together allow the use of, for example, a four stud rear axle to five stud wheels. One disc can be drilled for studs and wheel nuts, the other fitted with wheel studs. Trike builders have used them fitted to Reliant 4 stud axles allowing them to use large five stud rear wheels. Their use on the rear axle of reasonably light less powerful vehicles is fine but would not be suitable for other applications. The adaptors are usually 30-mm wide.*

We can change Volvo rear axle half shafts from their small 4.25" x 5 PCD to a more usable 4.5" x 5 American wheel bolt pattern. The bearings need to be removed and replaced as well as the slotting of the two brake discs; we suggest replacing them, as they are probably worn out any way. You will need a new set of wheel studs, **see below**.

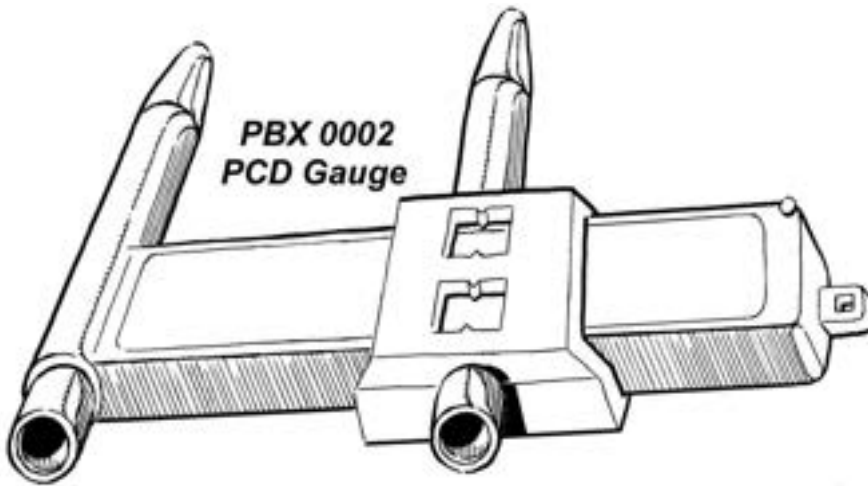
We carry spare Volvo wheel studs, **PBV 2005**, as they have such a fine spline that they can rarely be used twice. They have a long blank area after the splineing to act as a register for the brake disc.



**Tech Tip:** When tightening wheels you should work diagonally. On 5 stud wheels go for 1, 3, 5. 2 then 4. Repeat it tight & check in 200 miles.

## Tools & Gauges

### P.C.D. Beam Gauge



Our sliding beam pitch circle gauge, **PBX 0002**, is very easy to use, cones on one side fit neatly into wheel nut holes, while sockets on the other side fit over wheel studs. The gauge measures both metric and imperial wheel patterns in four, five, and six stud variations. This tool will pay for itself when you go to a swap meet and spot that set of second hand wheels you always wanted.

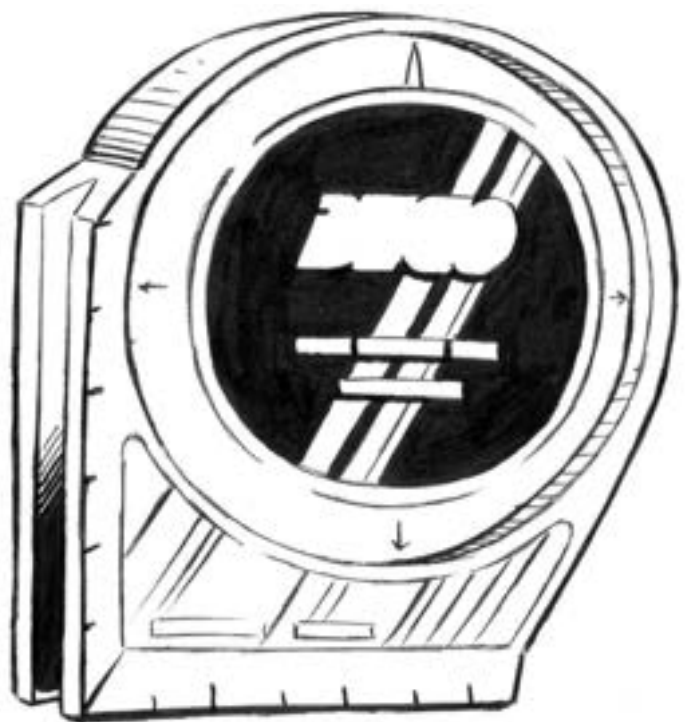
### P.C.D. Disc Gauge



This gauge, **PBX 0003**, is a quick way to determine the common American & Imperial pitch circles on wheel hubs. Bolt patterns from 5 x 4.5" (1950 on Ford), 5 x 4.75" (Jaguar/Chevy), 5 x 5" (Rover/Buick) and 5 x 5.5" (Early Ford) are catered for in a durable plastic. A four stud version, **PBX 0003/4**, is on the way

### Magnetic Angle Finder

Our Angle Finder PBX 0001 is very popular! Ideal for installing engines and transmissions. I use one to set up the castor angle on beam axles and checking prop shafts. A groove in the base allows the use of the gauge on tubing and a powerful magnet attaches it to steel,



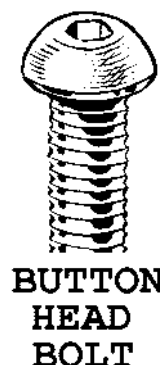
**PBX 0001**

**Tec Tip:** Check that you are using high quality bolts in critical areas. Us at least 8.8 or three lines, stamped or raised on head. If you can not find markings on your bolt do not use it. There are charts which give details such as strengths and marking.

Dome Nuts

Made from polished stainless steel, these dome nuts are available in a range of sizes and threads. Our price contains a complete list. The 5/16" UNC dome nut is useful for American air cleaners. Other sizes can be obtained to order.

- PBS 3028** St/St 6mm Polished Dome Nut.  
**PBS 3029** St/St 8mm Polished Dome Nut.  
**PBS 3030** St/St 10mm Polished Dome Nut.  
**PBS 3038** St/St 1/4" unf Polished Dome Nut.  
**PBS 3039** St/St 5/16" unf Polished Dome Nut  
**PBS 3040** St/St 3/8" unf Polished Dome Nut  
**PBS 3051** St/St 3/8" unc Polished Dome Nut

Button Head Bolts

We use a lot of these stainless steel bolts in our fixing kits. They provide a neat fixing, though not as strong as a cap or socket head bolt. A wide range of sizes are stocked, mostly in metric thread form as they are far cheaper than their imperial equivalent. Sizes available from stock are 3mm, 4mm, 5mm, 6mm, 8mm and 10mm with lengths from 10mm to 50mm.

Countersunk Socket Headed Bolts

We keep a small range of these bolts in metric and imperial sizes, please ask for particular sizes.

China Mugs

Our 1/2 pint china mugs have been tested as a worthy addition to any tool kit. Simply add tea or coffee & milk plus hot water, optional sugar & consume. Problems are instantly solved & street rod building times reduce dramatically. Works equally well with soup. Note: you will not become instantly rich & devastatingly attractive to the opposite sex. We have other designs from time to time, please ask or see us at a show.



- PBD 0050** "Strictly Street", Gasser Pop/Anglia, green design, white mug.  
**PBD 0055/R** "Peel Out", Pro-street Popular/Anglia red design, white mug.  
**PBD 0055/B** "Peep Out" Pro-street Popular/Anglia blue design, white mug

- PBD 0060** Fordson van black design on yellow mug  
**PBD 0065** Classic V8 design, blue and black on white mug  
**PBD 0070** Route 66, Brown design on orange, white mug

Upholster and Trim Clips

I came across these upholstery clips originally holding the door cards on Morris Minors. The clips **PBN 0350** use an offset 10-mm hole, clipping onto the edge of the hole. The plastic "Snap Sacks"

**PBN 0355** use a 7.5 -mm hole. Both are available under part number **PBN 0360** in packs of ten. Test-run these clips & sacks on spare material first.



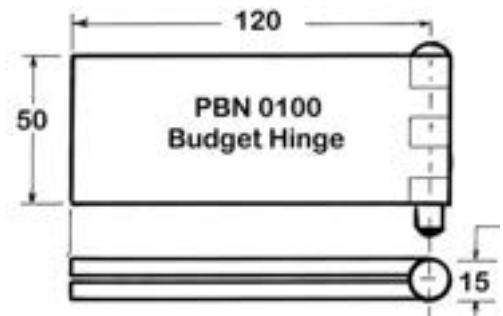
**Tech Tip** When cutting bolts to shorten them, place a plain nut on the thread between the head & the cut. Clean the end up with a file & unscrew the nut to remove any burrs. If difficult to remove, back the nut off & file again until removal is easy. Don't forget some copper grease.



### Door Hinges

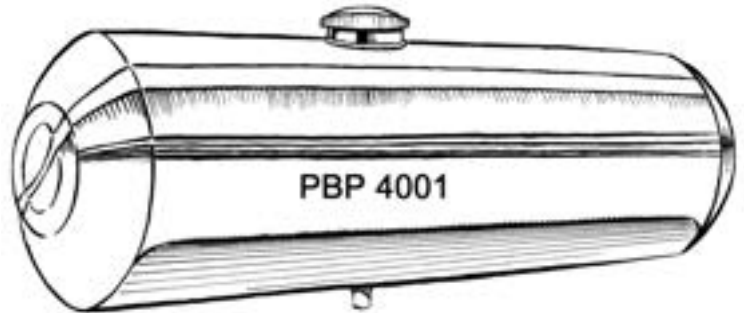


These hinges **PBN 0100** are made from mild steel with a stainless steel pivot pin. They would work on Model T's and open Roadsters as well as Coupe and Sedans. When setting hinges up, if possible replace the hinge pin with a suitable rod which passes through all hinges on that door. The rod should then be adjusted till it is vertical when viewed from the front or back of the vehicle (see sketch).

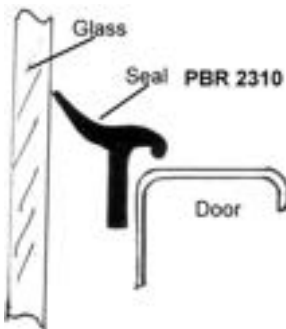


### Alloy Fuel Tank

These tanks **PBP 4001** could be a simple solution to your fuel tank needs. They measure 10" x 30" and hold 8.5 gallons and are made from alloy tubes with spun end caps. A polished filler cap is included as well as a tapped boss in the base. This boss is the outlet but I feel that low fuel outlets are not ideal as they collect any water in the fuel and should a leak develop in the fuel pipe you risk losing a whole tank of petrol. We can fit a top mounted pickup **PBP 4004** as well as adding a ring set up for a gauge sender unit **PBP 4003**; these are welded into the tank. We stock a bung to plug the bottom outlet. A pair of securing straps is included with the tank. These tanks are difficult to obtain so we do not always have them in stock.



### Door to window seal



This is the modern way to stop water entering the door. It can be glued or screwed to the return on the outer door. **PBR 2305** measures 17mm high with a 7mm lip.

### Blue Flexible Throttle Cable

This cable **PBT 0028** is economically priced. A small drum nipple is attached to the throttle pedal end of the 57" braided inner cable. The blue outer cable is 47" long and has a moulded snap in fire wall attachment.

### Wheel Adapters

We produce a series of bolt on alloy wheel adapters. Made from billet aluminium with high quality studs fitted. A full list of adaptors appears in the price list. Please phone for one off adaptors. A popular adapter **PBV 1010** bolts onto Volvo rear axles and uses Ford 4.5" x 5 wheels or **PBV 1011** again for Volvo axles but using Chevrolet wheels. Other adaptors are listed from **PBA 0503** on.



**Tech Tip:** When fitting door hinges into a wooden door frame use a small pilot hole & lubricate the screws with soap. Use stainless steel screws if possible.

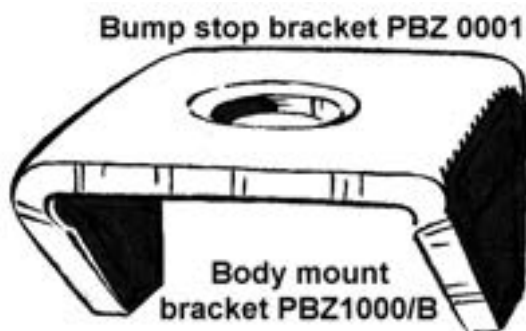
King Pins

The Ford Mk 1 Transit (single rear wheel) king pins were used on a lot of Sixties and Seventies street rods. They are easily recognised as they have a thick round rubber ring, which acts as a grease seal, on the top and bottom of the pin. Even if the ring is missing the, deep groove is a dead give away. We stock a complete high quality kit, **PBI 1100**, which includes pins, bushes and seals.

**Note;** You cannot over grease king pin assemblies, the more often you lubricate them the longer they will last. Once every 1000 miles is the least service interval, the other advantage is lighter, better self centring steering.

Body and Radiator Mounts

Our mild steel chassis bracket, **PBZ 0001**, is designed to use our rubber body or radiator mount, **PBR 2020**. The bracket can be welded to a chassis for body mounting or a front cross member to support a radiator. Bracket, **PBZ 2020/B**, is similar but has a smaller hole in the centre to take our 50-mm rubber bump stop, **PBR 2021**.

MGA Lamp

These replicas, **PBL 0122**, are of a very high quality. They were used on the MGA, Morris Minor, TR3 and several other Fifties sports cars. They suit a Popular or Anglia & make a good alternative to the dwindling supply of good original lamps. The lens has a built in reflector & striated sides & is better quality than the original lens. A chrome base is fitted with a twin filament bulb holder for the normal stop/tail bulb. The lamp comes complete with a lens gasket & base gasket in rubber, as well as a suitable bulb. The rubber base gasket has two self sealing access points for wiring & the lamps will of course accept our bright & extra bright bulbs. Two 5-mm holes, 47-mm apart are used to fix the flush fitting lamp.

Ball Joint & Track Rod End Covers

Why replace a joint when all you need is a replacement rubber cover, **PBC 3109**, just add the number in the chart. We also stock covers for Early American Ford track rod ends, **PBI 1116**.



	Small hole	Large hole	Height
1	10mm	24mm	21mm
2	11mm	29mm	22mm
3	13mm	35mm	28mm
4	14mm	28mm	22mm

Now part of MOT failure. Complete with rubber O-rings

**Tech Tip:** Take care when working on American Fords, Their side lamps are wired with black cable, confusing, as most English looms use black as an earth wire.

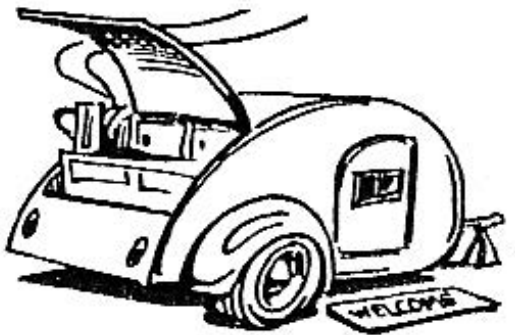
## Terms and Conditions

**We use various carriers to send out parts, small items are usually sent by 1<sup>st</sup> class post, though an overnight service is available at extra cost. Parcels up to 5kgs can be sent on a very reliable over night service & is the most economical. For urgent or bulky items we have an excellent 24 hour service. Larger items are, at this stage too bulky for our carriers, therefore we recommend personal collection by arrangement as being the most cost-effective method. Other items may be collected, but please make an appointment to avoid either missing us or finding that we are out of stock of the part you need.**

**Payment: We accept Visa Debit or credit cards & MasterCard.**

**Returns: Please phone us on 0844 544 0960 if you have a problem with our parts especially if you wish to return them. You must contact us before returning parts. We retain the right to make a discretionary handling charge & cannot normally refund carriage charges unless we are at fault.**

**Please Note: Should you find any mistakes in this catalogue we would be grateful if you bring it to our attention. If in doubt the current price list is normally correct. The price list on our web site is changed frequently**



**Teardrop Plans? Phone us if you need some.**

**Most of the drawings in this catalogue when done by my son Travis Brown. The most of the rest were either by Chris Froggett or Andy Ford, Thank you Gentlemen**



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### Gibbs Brand Lubricant.

We are pleased to stock this superb product from the 'States, where it is already gaining a great reputation in the hot-rodding world, being used by the likes of Cole Foster and Troy Trepanier. Gibbs Brand Lubricant is a revolutionary, patented product with many unique features. It works in all temperatures, to clean and

eliminate corrosion, to penetrate, to waterproof, and to lubricate all metals and mechanical hardware. It's even safe to use on many other materials including plastics, rubber, and wood! It leaves no sticky dirt attracting residue and can even be painted-over! As they say.....You've got to use it to believe it!