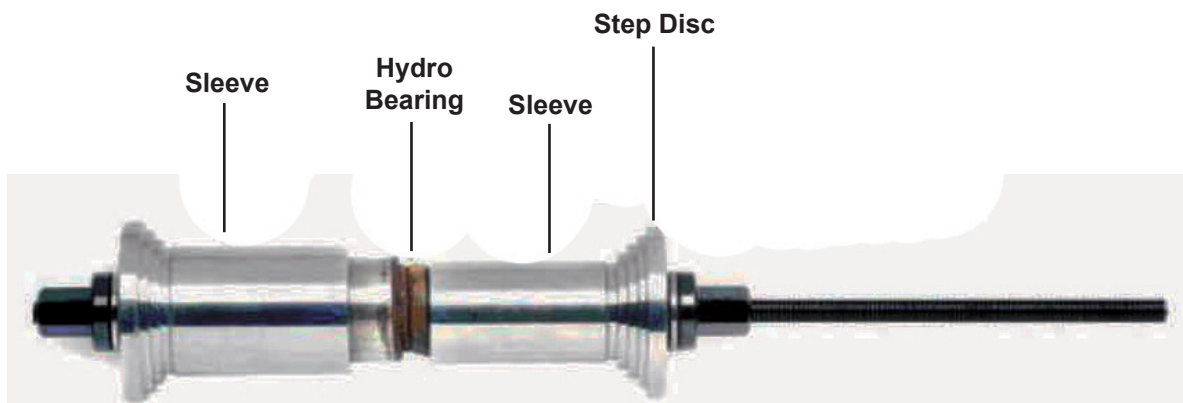


08780000 - Press & Pull Sleeve Kit

- Universal tool set for extracting and drawing in bushes, bearings, seals etc.
- Fully universal applications - Car - LCV - HGV
- Contains 20 x Press Sleeves
- Inside diameter range : 34 - 72mm
- Outside diameter range : 44 - 82mm
- 4 x step plates
- 4 x pulling spindles with thrust bearings
- Set 08780000 can be used on its own, with workshop press, or with Universal Press Frame (18700000)



Application Example with Pulling Spindle



WARNING - In the case where the hole in the centre of the bush is small in relationship to the outside diameter, it is recommended that the hole be drilled out to enable a larger spindle to be used to safeguard damage to the threads

ALWAYS USE PENETRATING OIL TO EASE REMOVAL OF THE OLD BUSH
ALWAYS LUBRICATE THE SCREW THREADS WITH MOLYBDENUM DISULPHIDE
(BLACK GREASE) BEFORE USING THE TOOL

08780000 - Press & Pull Sleeve Kit

Application with Workshop Press



08780000 & Universal Press Frame



PART NUMBER	DESCRIPTION
08781170	Nut M10 with Bearing
08781270	Nut M12 with Bearing
08781370	Nut M14 with Bearing
08781470	Nut M16 with Bearing
08783170	Step Disc No 1
08783270	Step Disc No 2
08783370	Step Disc No 3
08783470	Step Disc No 4
08782170	Spindle M10
08782270	Spindle M12
08782370	Spindle M14
08782470	Spindle M16
08785170	Sleeve 34mm - 44mm Ø
08785270	Sleeve 36mm - 46mm Ø
08785370	Sleeve 38mm - 48mm Ø
08785470	Sleeve 40mm - 50mm Ø

PART NUMBER	DESCRIPTION
08785570	Sleeve 42mm - 52mm Ø
08785670	Sleeve 44mm - 54mm Ø
08785770	Sleeve 46mm - 56mm Ø
08785870	Sleeve 48mm - 58mm Ø
08785970	Sleeve 50mm - 60mm Ø
08786070	Sleeve 52mm - 62mm Ø
08786170	Sleeve 54mm - 64mm Ø
08786270	Sleeve 56mm - 66mm Ø
08786370	Sleeve 58mm - 68mm Ø
08786470	Sleeve 60mm - 70mm Ø
08786570	Sleeve 62mm - 72mm Ø
08786670	Sleeve 64mm - 74mm Ø
08786770	Sleeve 66mm - 76mm Ø
08786870	Sleeve 68mm - 78mm Ø
08786970	Sleeve 70mm - 80mm Ø
08787070	Sleeve 72mm - 82mm Ø

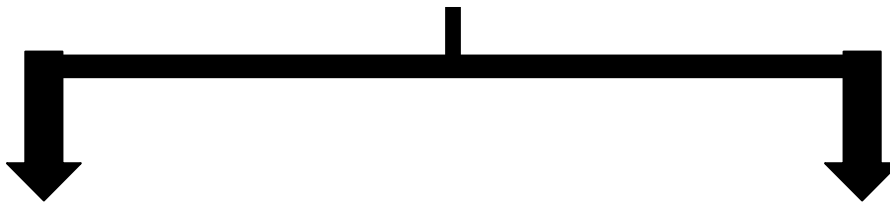
Suspension Removal & Installation



08780000
Universal Press & Pull Sleeve Set



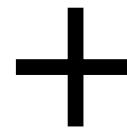
**If No through Hole to
increase capabilities**



Workshop Press



18700000
Universal Press Frame



18780100
Extension set for Press Frame

Vehicle Specific Press Piece Kits

use with...

18720100

BMW E36 / E46 Rear
Suspension Bushes

18760100

VW Golf 3 Rear Suspension Bushes

18760200

VW Golf 4 / Audi A2 / A3 Rear Suspension
Bushes

18760300

VW LT & Mercedes Sprinter Ball Joints

18750100

Renault Laguna Rear Suspension Bushes

Either...



18700000
Universal Press Frame

OR...



Workshop Press

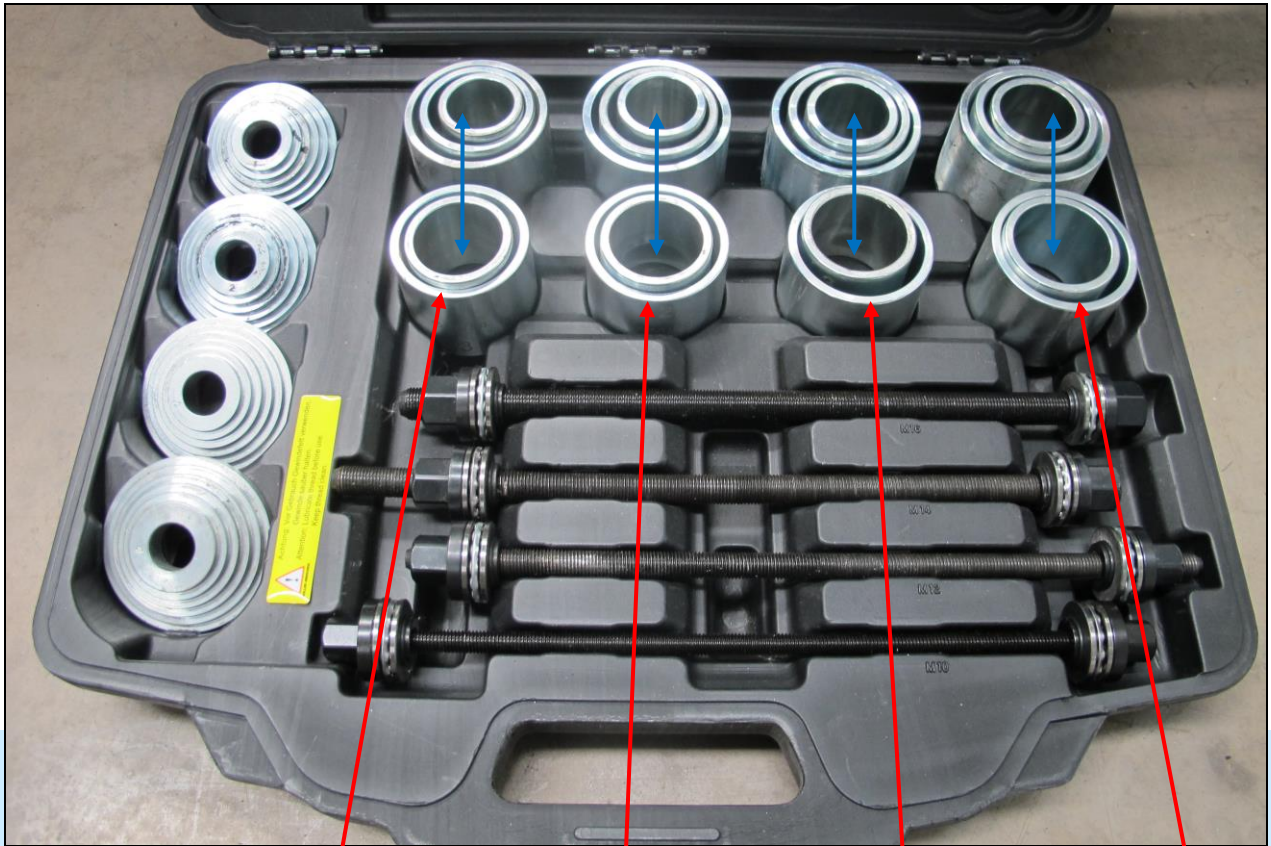
Stand Alone



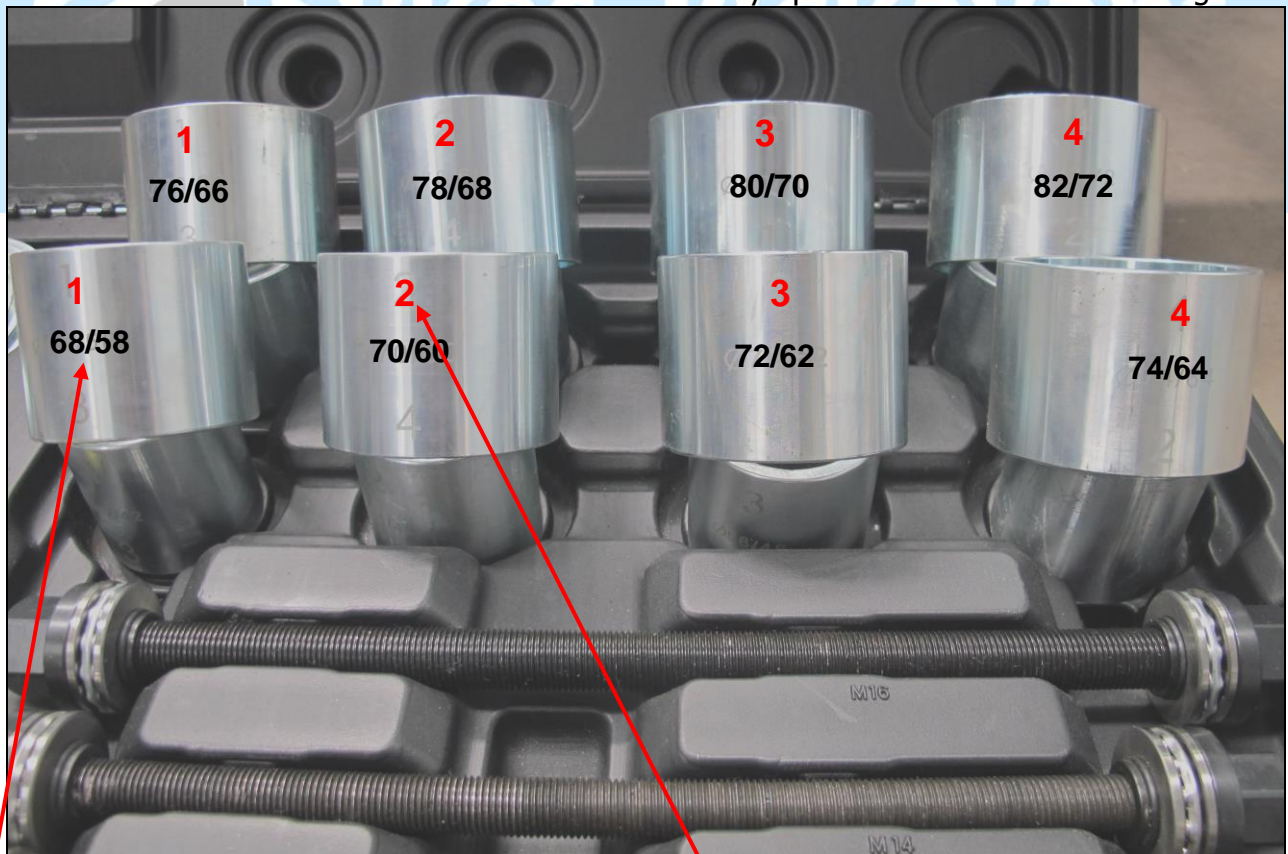
The Sykes-Pickavant 08780000 universal press and pull sleeve kit, is a precision tool set for extraction and installation of bushes, bearing and seals in a vast range of applications.

In addition to the main user instructions:

1. Always carefully select the correct sleeves for each task
 - a. The removal sleeve should always be carefully selected to ensure it is a few millimeters smaller than the component it is pushing against – so not to foul and jam in the housing
 - b. The void sleeve the component is being drawn into should be carefully selected to be a few millimeters larger, so the component does not foul and jam inside it
 - c. Failure to select the correct sizes of sleeve may lead to overloading and subsequent damage to the spindle threads – such loading is not covered under warranty
2. Where used: carefully select the correct spindle for each task
 - a. Select the largest sized spindle from the kit that is able to pass through the central hole in the component being worked on
 - b. Check to see if the hole size can easily be enlarged to allow the use of a larger diameter spindle – example drilled out
 - c. Always ensure the spindle threads are well lubricated with a high quality Molybdenum Disulphide grease
 - d. Using the largest possible spindle ensures highest strength and longest service life
 - e. Spindle ratings: M10=4T, M12=6T, M14=8T & M16=10T



Sleeve numbers 1's 2's 3's 4's
 Kit shown with all sleeves in number order and correct way up for identification and storage



This way each sleeve will always be 2mm difference in size from the one next to it; note ensure the OD/ID size in center always this way up – and then the correct location number will be above it

Sleeve stacking “stair stepping”: for more clearance over a bush.

When a bush is deeper than the void it is being pushed from or into, then use an extra sleeve to create a void of greater dimension; choose a sleeve 6mm larger than the natural void piece to ensure a precise fit.

This is due to the unique Sykes-Pickavant stepped profile on one edge of each sleeve; all are 5mm thick but have an outer edge and stepped inner edge on the sides (numbered) to engage with the corresponding stepped backing discs or each other; these steps lock the sleeves together.

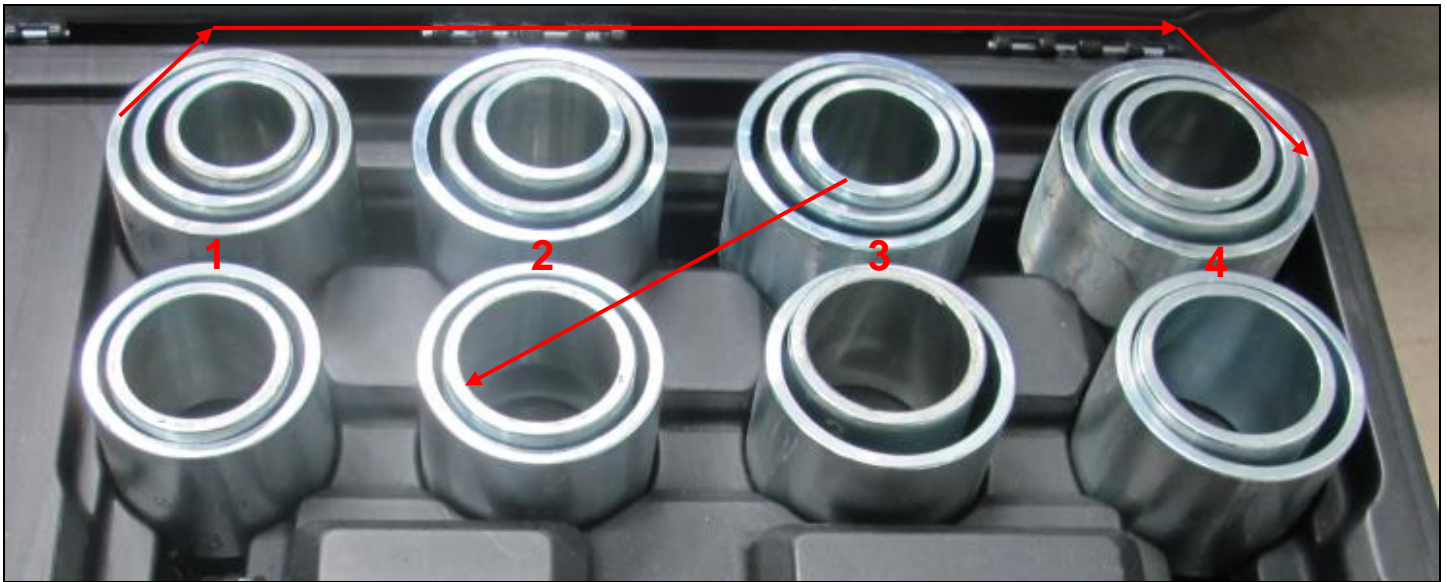


Used this way the OD/ID sizes will be 6mm different between sleeves, in the example in the left image; sleeve with the 66mm ID would be the natural void piece and the sleeve with the 72mm ID locked in front of it against the workpiece to provide an even larger void area.

So when looking into the box, a stacking sleeve will be 3 places away from the sleeve you are using as the natural void piece.

Sleeve sizes in the kit build up (smallest to largest) from left to right and back row to front row – before jumping from the front right position to the rear left & starting again, this is repeated over all 5 rows - from the 34/44mm (top left inner) up to the biggest 72/82mm sleeve top right outer.

Sleeve stacking example shown in red below



Examples: 76/66mm sleeve No1 top outer, the sleeve to use for stacking this one is sleeve 82/72 No4 top outer 3 positions to the right; also shown is 48/38mm sleeve No3 top inner – use 54/44mm sleeve No2 lower inner.



Sykes-Pickavant®

Sleeve sliding examples shown in blue below



For 54/44mm sleeve No2 lower inner, use either 34/44 sleeve No1 top inner as the smaller piece; or else 64/54mm sleeve No3 upper middle as the larger piece.

Sliding pieces, sleeves machined to be a perfect fit between others

When sleeve pieces need to pass inside others in use, it is easy to identify the correctly sized sleeve to allow a precise operation.

As per sleeve stacking, always refer to the OD/ID data on the sleeves, and choose a sleeve 10mm larger or smaller than the one you first select.

Although they would appear to be the exact same size - which shouldn't pass each other - these pieces are actually machined to have a fine gap between them when used together & this allows them to pass freely in use.

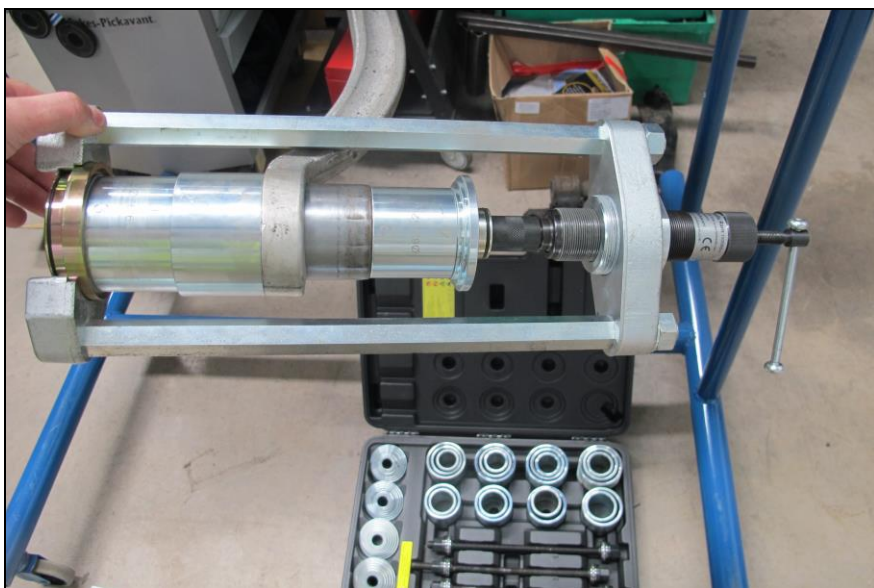


To select the correct sleeve to freely pass another, in the box choose a sleeve that is 5 positions away from the original sleeve location.

Use of 08780000 sleeves in other products

The sleeves are designed to work with a range of other SP products, making initial purchase more desirable and also they can work with 187 series press frames; C frames and individually in workshop presses.

The sleeve pieces are made of mild steel so can be individually machined to fit bespoke applications – as each part in the kit has a part number and are available as spare parts.



08780000 pieces shown on the left in a 187 press frame with 18780400 adaptor ring and extension leg set 18780100. Below some 08780000 spares information from the 2014 SP main catalogue

Part No.	Description / Dims	Quantity	Part No.	Description / Dims	Quantity
08785170	Sleeve 34/44	1	08786270	Sleeve 56/66	1
08785270	Sleeve 36/46	1	08786370	Sleeve 58/68	1
08785370	Sleeve 38/48	1	08786470	Sleeve 60/70	1
08785470	Sleeve 40/50	1	08786570	Sleeve 62/72	1
08785570	Sleeve 42/52	1	08786670	Sleeve 64/74	1
08785670	Sleeve 44/54	1	08786770	Sleeve 66/76	1
08785770	Sleeve 46/56	1	08786870	Sleeve 68/78	1
08785870	Sleeve 48/58	1	08786970	Sleeve 70/80	1
08785970	Sleeve 50/60	1	08787070	Sleeve 72/82	1
08786070	Sleeve 52/62	1	08782170	Spindle M10	1
08786170	Sleeve 54/64	1	08782270	Spindle M14	1