

**GRAYSTON ENGINEERING LIMITED**115 Roebuck Road • Chessington • Surrey KT9 1JZ • UK  
Telephone: 020 8974 1122 Fax: 020 8974 2288**SPECIAL INSTRUCTIONS**

65S-E.8.02

auxiliary spring set

65S855, 65S860

In these SPECIAL INSTRUCTIONS the fitting parts are indicated for each type of car.

- parts below the aux. spring: BOTTOM assembly (polybag)

for fitting on the *original* shock/strut, see column BOTTOM type ... and page 3

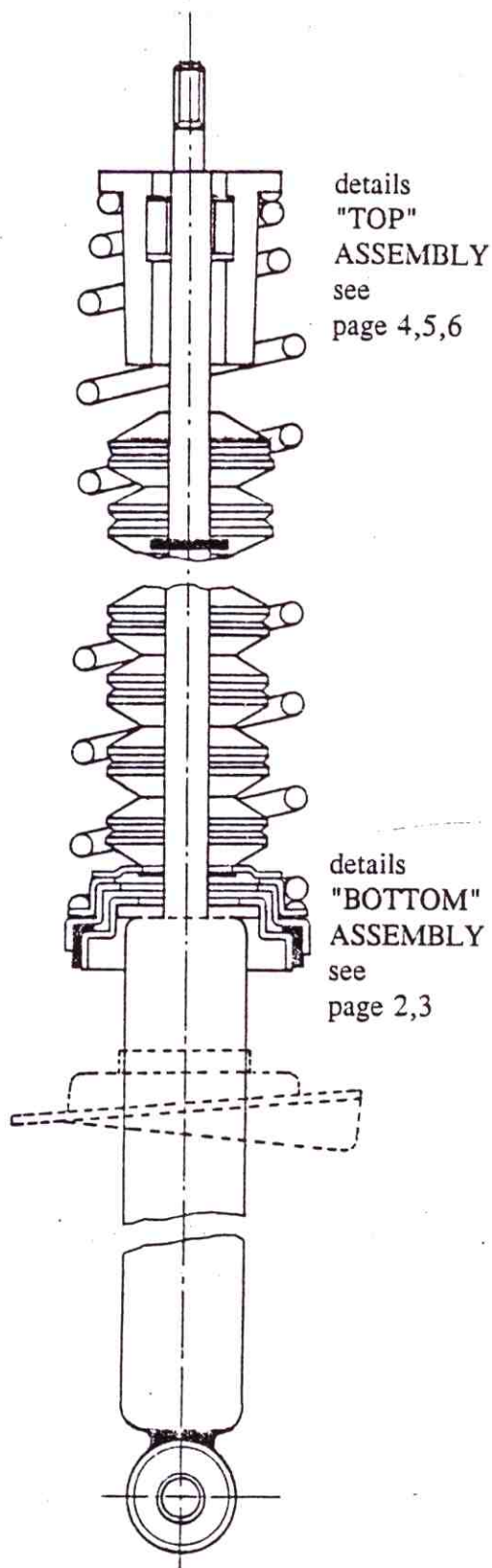
for fitting on a *non-original* shock/strut, see TABLE on page 2 and page 3

- parts on top of the aux. spring: TOP assembly (polybag)

see column TOP type ... and page 4, 5, 6

<u>Model</u>	<u>Year</u>	<u>BOTTOM</u>	<u>TOP</u>	<u>REMARKS</u>
CITROËN Visa excl. Chrono, GT, GTI	78-91	F	lc.1	.
PEUGEOT 104	10/75-10/84	F	lc.1	.
PEUGEOT 204	01/69-09/76	F	lc.1	.
PEUGEOT 304	01/69-10/80	F	lc.1	.
PEUGEOT 305 I,II (excl. Break/Station)	02/78-09/87	F	lb.2	.

*FITTING INSTRUCTIONS*  
see page *SPECIAL INSTRUCTIONS* !



#### RECOMMENDATION:

Replace faulty shocks, however remember that only new gas- or hydraulic shocks do not raise the car.

Install CARSUPPORT auxiliary springs or CARSUPPORT replacement springs for extra car support.

#### STRUT (Mc Pherson)

1. The normal lay-out is:  
1 central nut on top of the piston rod  
or  
2 or 3 smaller nuts fitted to the upper spring seat. In that case do not unscrew the central nut.
2. Mark the upper spring seat(s), the spring and the lower spring seat.
3. Disconnect the strut, sometimes only partially:  
see page: "SPECIAL INSTRUCTIONS"
4. Remove main spring, spring compressor may be needed:  
-unscrew central nut  
-place removed fitting parts in correct order
5. Fitting parts of the aux. spring set as per instructions:  
-BOTTOM PARTS below the aux. spring:  
see page 2 and 3  
-TOP PARTS on top of the aux. spring:  
see page 4 and 5

#### "NORMAL" SHOCKABSORBER

1. Disconnect shock, sometimes only partially:  
see page: "SPECIAL INSTRUCTIONS"
2. Remove steel/plastic dustcover:  
see page 6
3. Fitting parts of the aux. spring set as per instructions:  
-BOTTOM PARTS below the aux. spring:  
see page 2 and 3  
-TOP PARTS on top of the aux. spring:  
see page 6

NOT ALL PARTS OF THIS SET WILL BE USED

**"BOTTOM" ASSEMBLY**

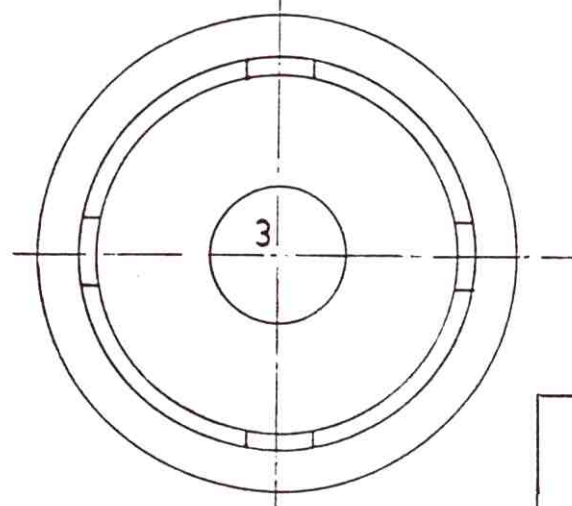
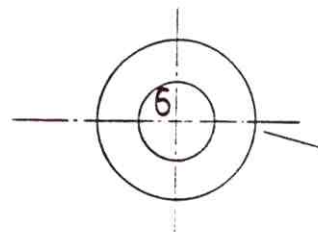
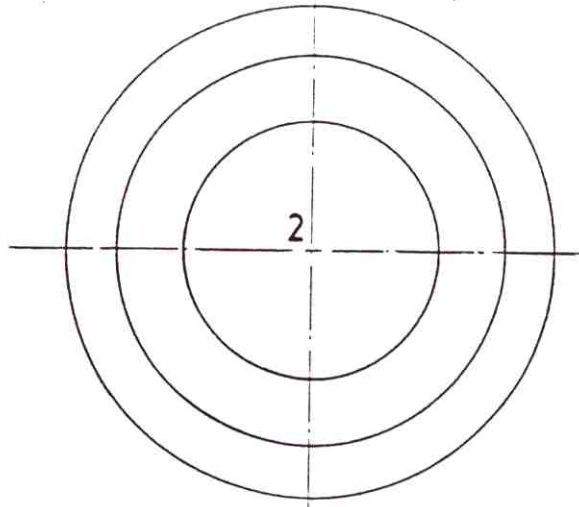
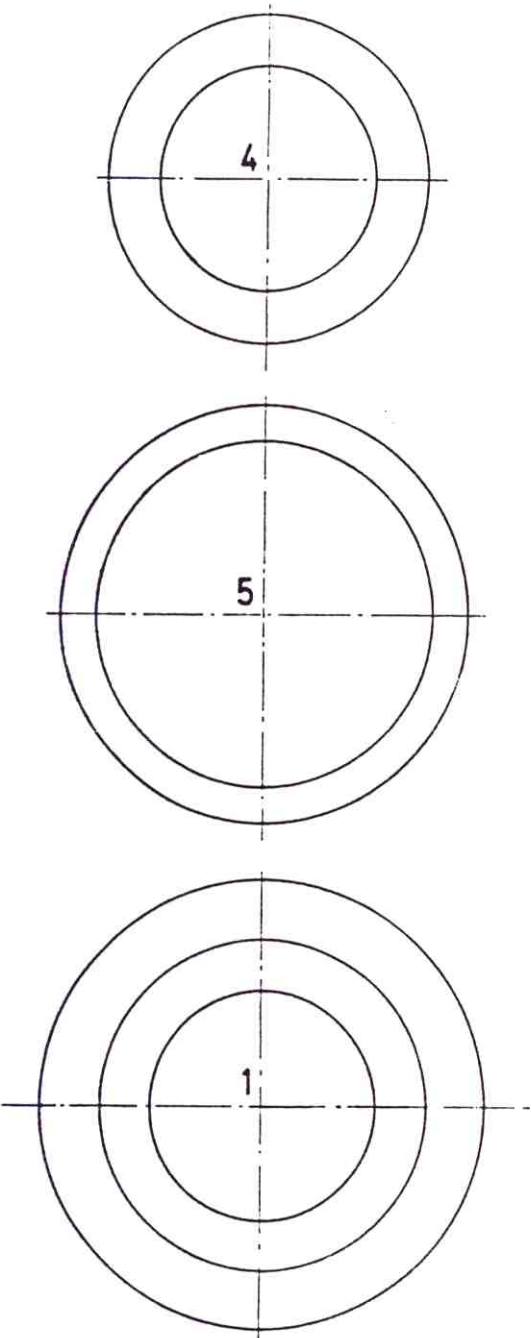
polybag containing:

- (1) steel seat, small
- (2) steel seat, large
- (3) seat with bellow fitted
- (4) rubber collar, small
- (5) rubber collar, large
- (6) rubber ring, small

Measure diameter d1 of the plastic or steel top of the shockabsorber body and select parts 1-5 as shown in the TABLE.

If diameter d1 is greater than 60 mm:  
remove rebound cap if fitted.

PLACE WIDE END OF AUX. SPRING ON SEAT 3.



piston rod diameter  
d2 = 9-16mm  
fit part 6  
*inside*  
bellow

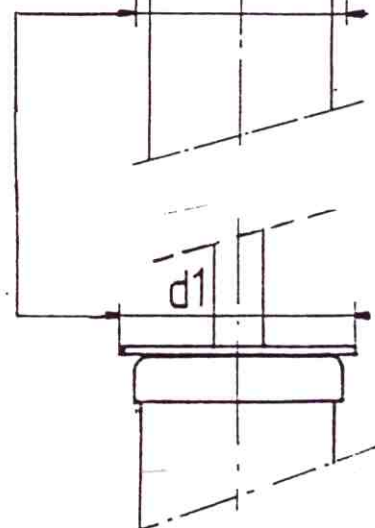
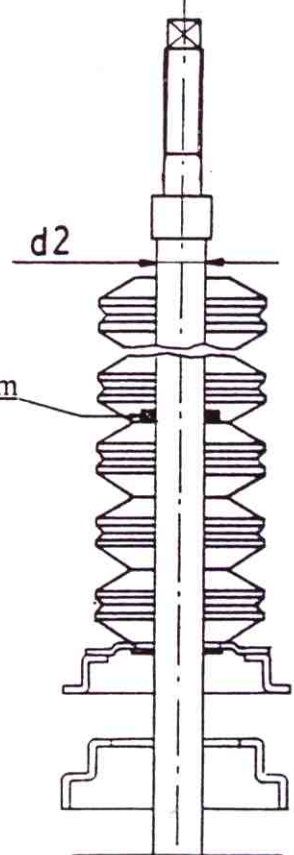
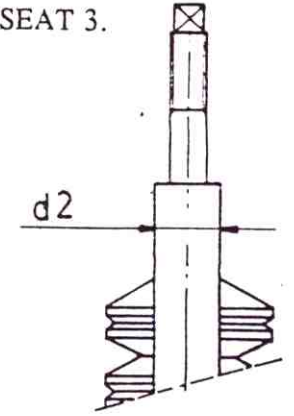


TABLE for parts required

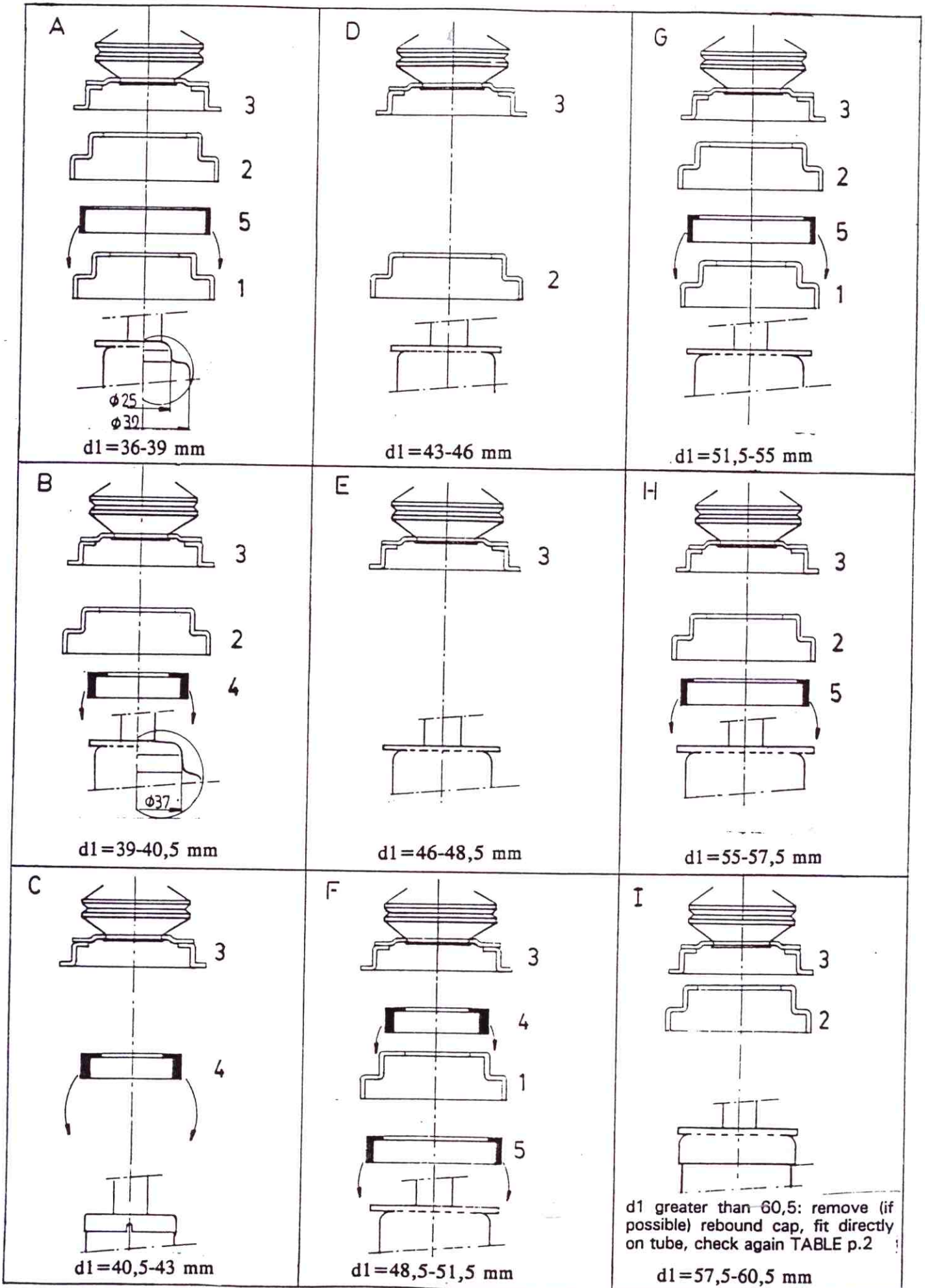
type	diameter d1 (mm)	needed parts
A	36 - 39	1+5+2+3
B	39 - 40,5	4+2+3
C	40,5 - 43	4+3
D	43 - 46	2+3
E	46 - 48,5	3
F	48,5 - 51,5	5+1+4+3
G	51,5 - 55	1+5+2+3
H	55 - 57,5	5+2+3
I	57,5 - 60,5	2+3

example  
Measure d1: for instance d1=38mm  
See TABLE: type A.  
Parts 1, 5, 2 and 3 has to be fitted.  
Part 4 will not be used.

On page 3 the assembly of these parts is shown: see A

**"BOTTOM" ASSEMBLY**  
to select the parts 1-5:  
check TABLE page 2

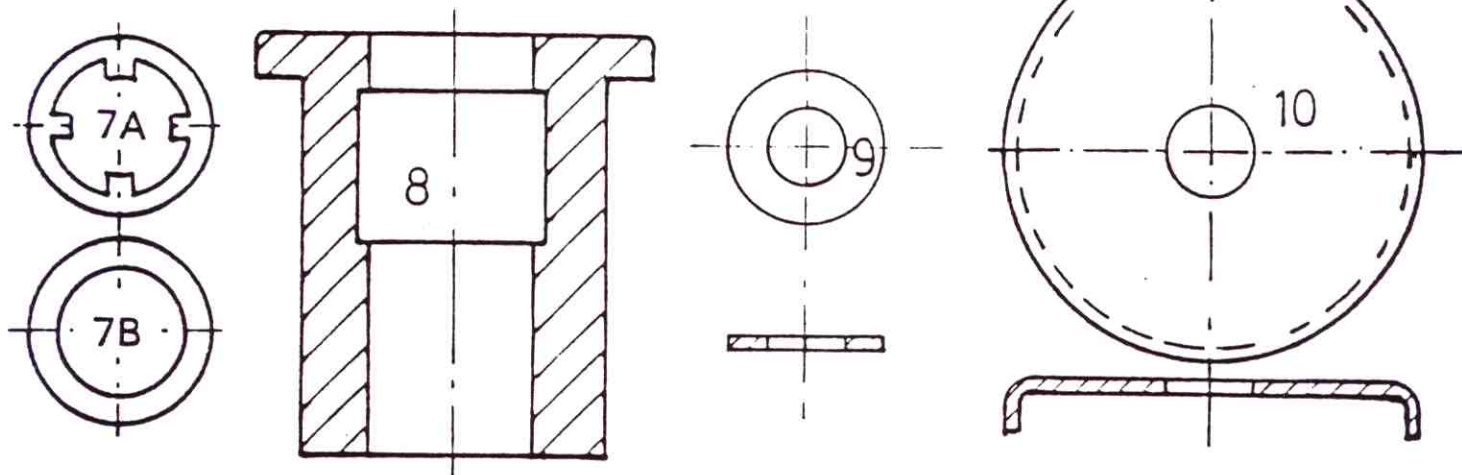
See drawing page 2 Piston rod diameter  $d_2 = 9-16\text{mm}$ :  
stretch rubber ring 6 halfway over the piston rod then fit  
the bellow. If  $d_2$  is greater: do not fit rubber ring 6



"TOP" ASSEMBLY

polybag containing:

- (7A) plastic bush
- (7B) plastic bush
- (8) rubber bumpstop
- (9) hardened steel washer
- (10) steel cap



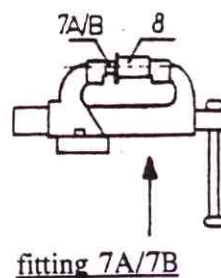
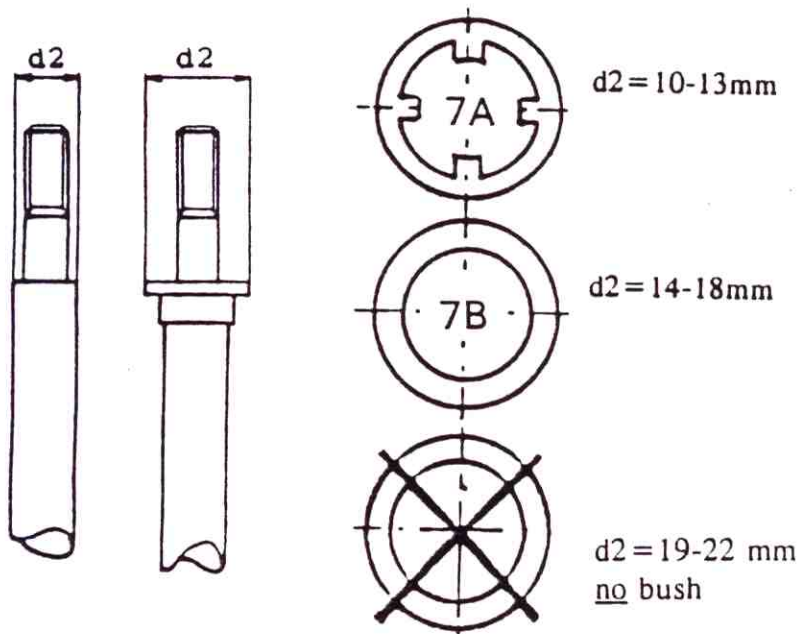
FITTING "TOP" ASSEMBLY

Select plastic bush 7A/7B -or- no plastic bush

There are two types of plastic bushes (7A/7B).

Select the plastic bush with the smallest piston rod clearance as follows:

1. Try to shift plastic bush 7A completely downwards over the piston rod. If it matches press 7A into bumpstop 8.
2. If 7A does not matches, try in the same way 7B.
3. If 7B does not matches do not use a plastic bush.



To select steel washer 9 and cap 10 :

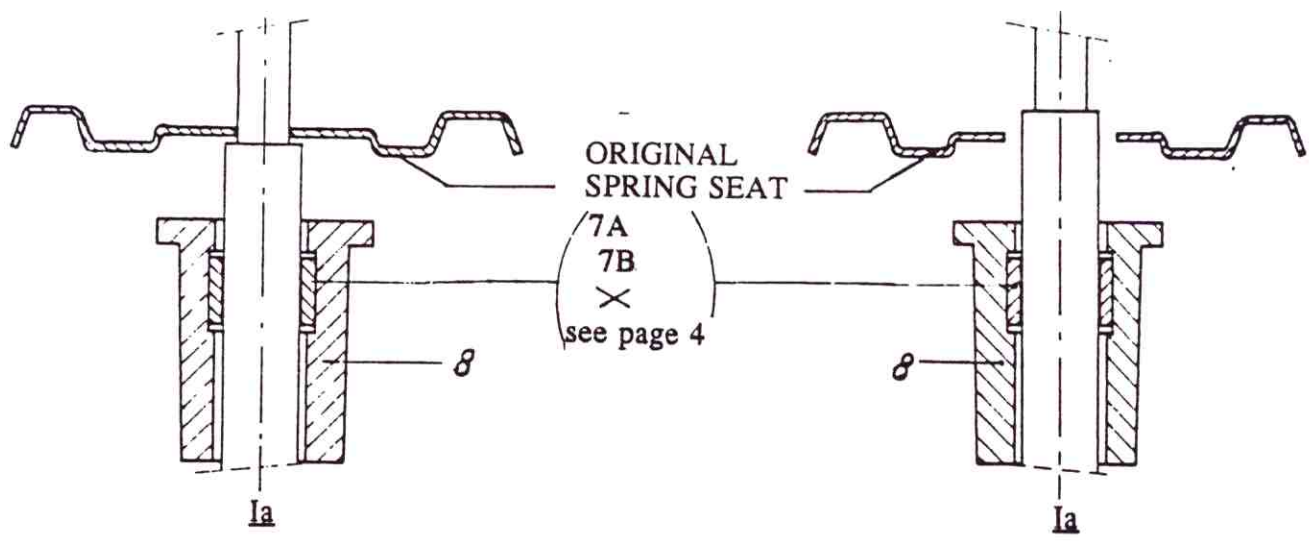
STRUT: see page 5

SHOCKABSORBER: see page 6

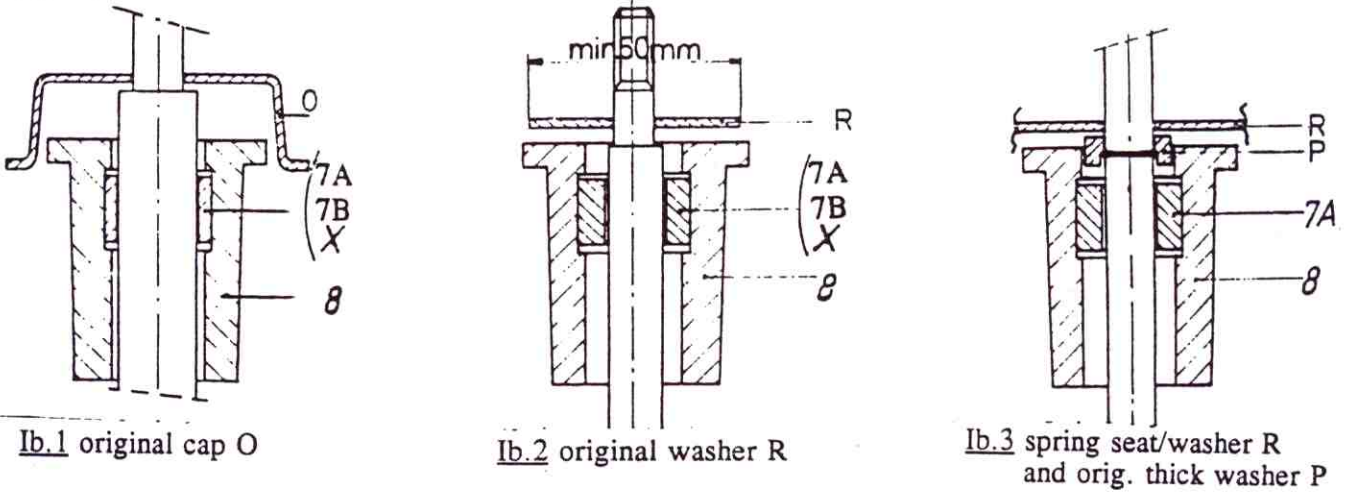
**FITTING "TOP ASSEMBLY"** (fitting "BOTTOM ASSEMBLY" see page 1,2,3)

- original bumpstop and dustcover will be re-placed by parts in the kit
- install aux. spring
- install bumpstop 8 with or without spacer 7A/B, see page 4
- type Ia and Ib.1,2,3: washer 9 and cap 10 not to be used
- type Ic.1,2,3: fit washer 9 (if possible) + cap 10
- re-install main spring / strut using original parts on top

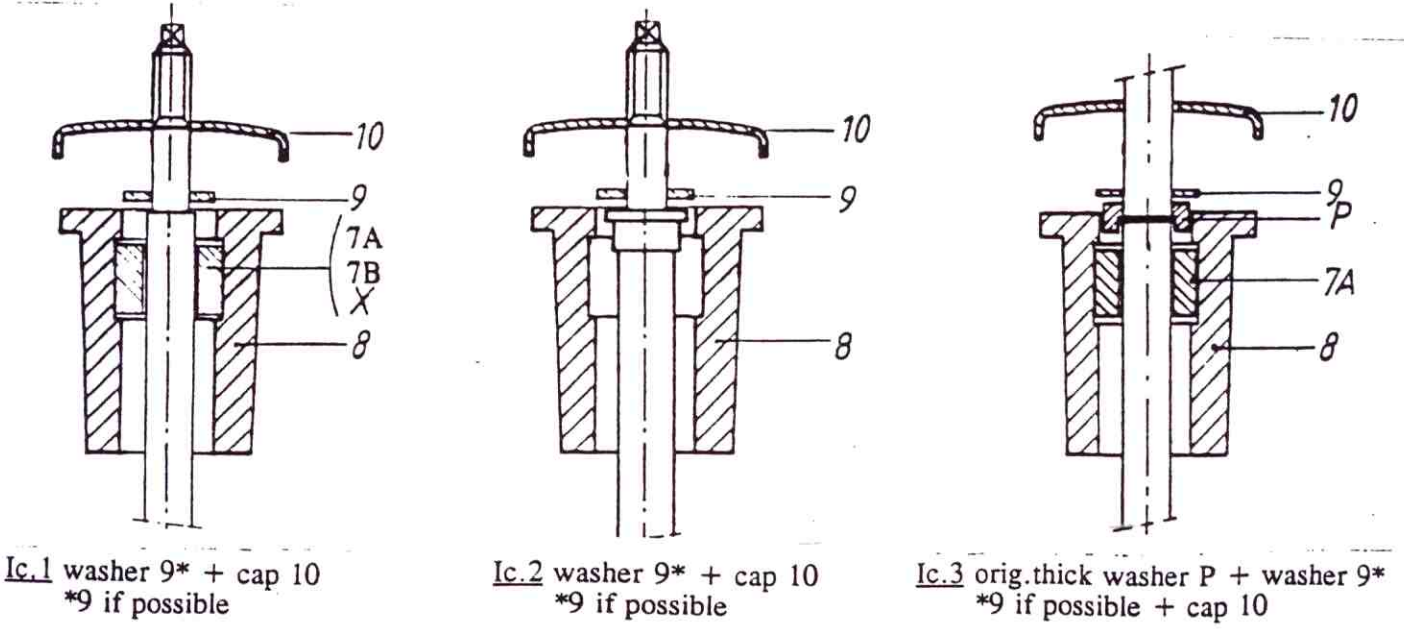
**TYPE Ia. Strut without removable original bumpstop cap**



**TYPE Ib. Strut with removable original bumpstop cap or washer**



**TYPE Ic. Removable original bumpstop cap or washer is too small and has to be replaced**



**Ic.1** washer 9\* + cap 10  
\*9 if possible

**Ic.2** washer 9\* + cap 10  
\*9 if possible

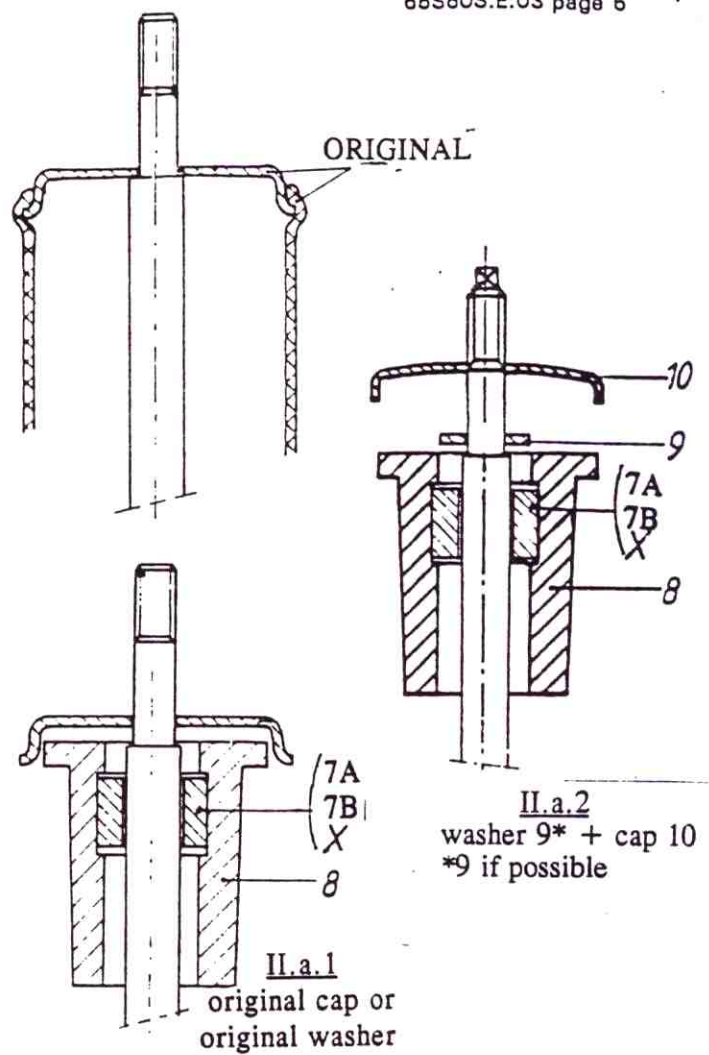
**Ic.3** orig.thick washer P + washer 9\*  
\*9 if possible + cap 10

for **SHOCKABSORBER** only  
(not carrying a main spring - no strut)

**TYPE IIa**

Shockabsorber with plastic or rubber dustcover fixed onto REMOVABLE steel cap or washer on top

- remove steel cap and pull off dustcover
- remove original bumpstop if fitted
- fit the correct "BOTTOM" parts, see page 1,2,3
- install aux. spring
- install bumpstop(8) with or without bush 7A/B, see p.4
- II.a.1:  
re-install the original steel cap if bumpstop(8) fits
- II.a.2:  
fit washer 9 (if possible) and cap 10 if the orig. cap is too small, see page 5: I.c.1, I.c.2, I.c.3
- re-install the shockabsorber using the original fitting parts on top



**TYPE IIb**

Shockabsorber with a fixed (welded) steel dustcover, or with a fixed (welded) steel cap on top and a plastic cover

- cut the cap 4 times in a square on 21 mm wide as shown
- grind or file off corners to allow the bumpstop 8 to pass
- remove original bumpstop (if fitted) by cutting lengthwise
- make sure not to damage the piston rod
- fit the correct "BOTTOM" parts, see page 1,2,3
- install aux. spring
- install bumpstop 8 without bush 7A/B
- fit washer 9 (if possible) and cap 10, see II.b
- re-install the shockabsorber using the original fitting parts on top

