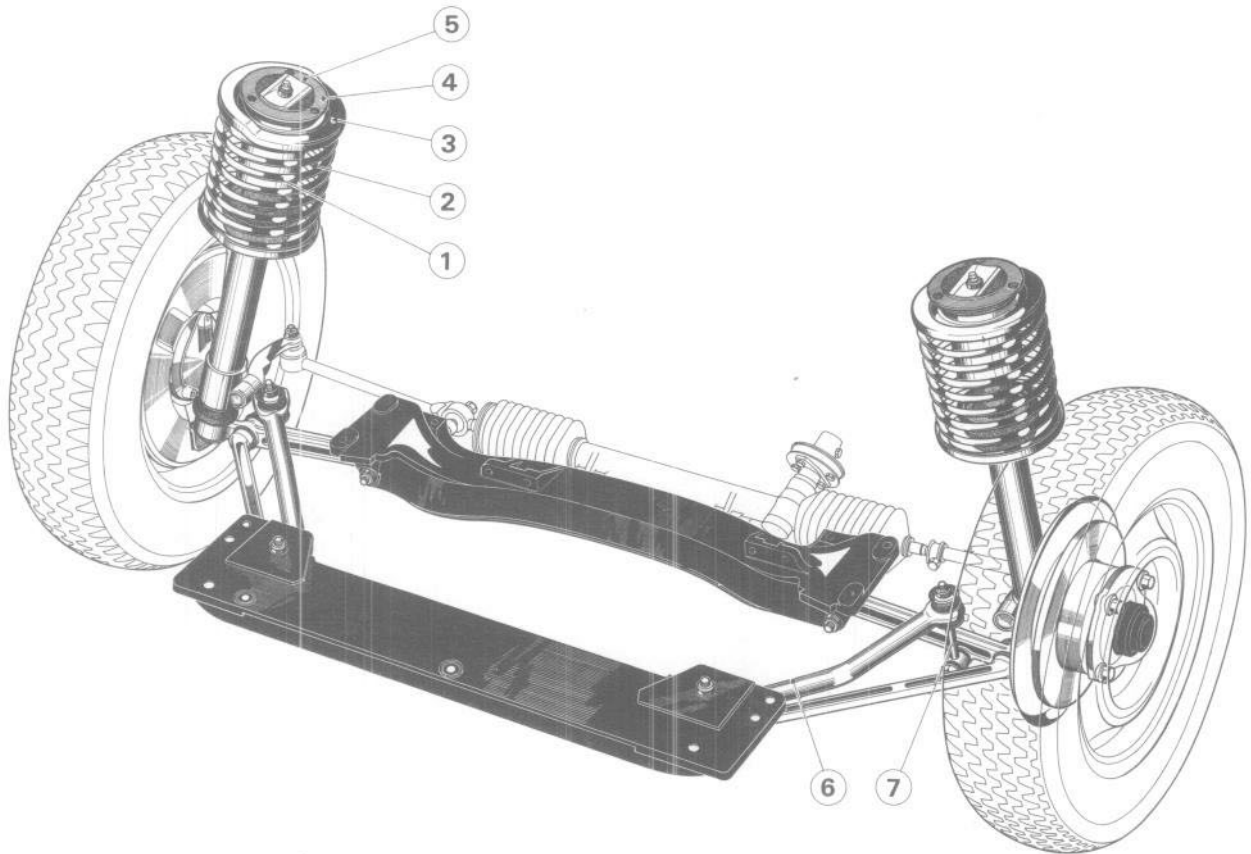


FRONT SUSPENSION  
IDENTIFICATION - CHARACTERISTICS

9 01 01<sup>(1)</sup>



- 1 - Shock absorber
- 2 - Suspension spring
- 3 - Spring upper seating cup
- 4 - Upper flexible mounting
- 5 - Safety cup
- 6 - Anti-roll bar
- 7 - Anti-roll bar connecting link

PEUGEOT

12 - 69

Supersedes sheet class 9, page 01 01

504 Workshop Manual - Ref. 1212 E

0102

9

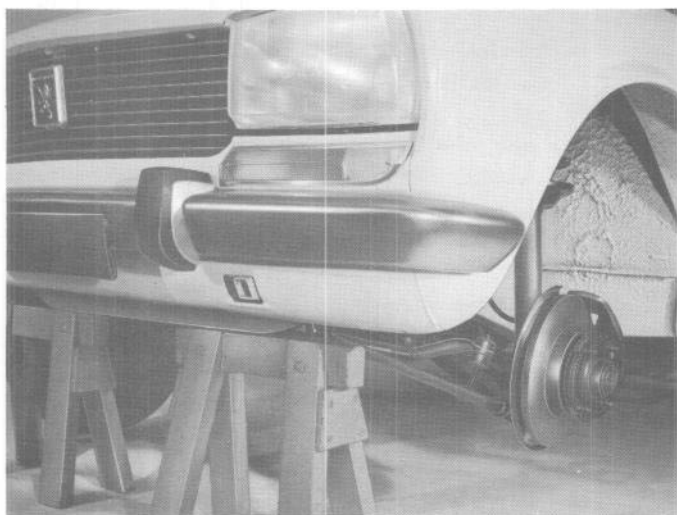
**FRONT SUSPENSION**  
**IDENTIFICATION - CHARACTERISTICS**

**FRONT SPRINGS**

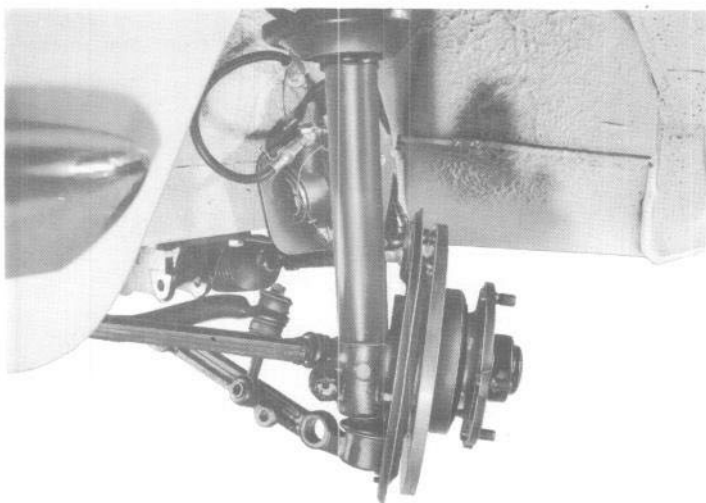
MODELS	Flexibility mm/100 kg	Coil dia in mm	Outer dia. of the last coil in mm	Free Height in mm	Height under load 318 kg in mm	Reference	P.N.
<b>Saloons</b> 504 A01 } as from 504 A02 } beginning 504 A03 } of series	85	13	163	500	225 to 230	1 red and 1 green	5001.63
					230 to 235	1 white and 1 green	5001.64
<b>Convertibles-Coupés</b> 504 B02 } as from 504 C02 } beginning } of series	65	13	163	426.5	214 to 220	1 red and 1 yellow	5001.75
					220 to 224	1 green and 1 blue	5001.76

FRONT SUSPENSION  
SUSPENSION ELEMENT REMOVAL

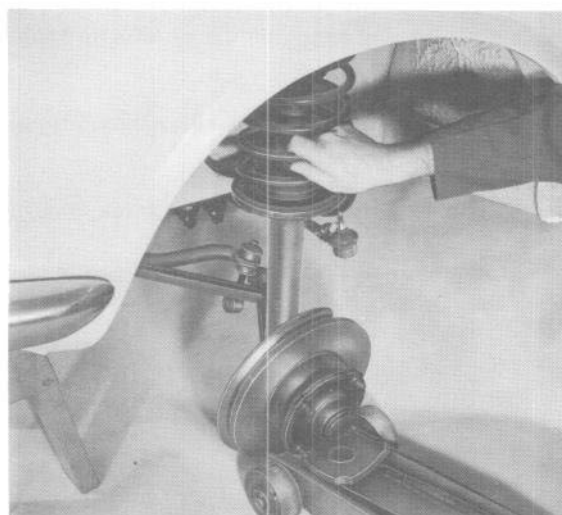
9 0201



- Raise the car by the front jack guides using the block and trackle chain hoist or a trolley jack placed under the front cross member.
- Check under each side of the front cross member.
- Remove the wheel.

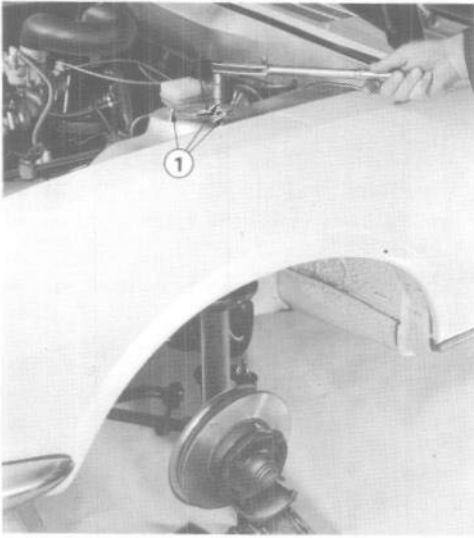


- Remove :
- the brake caliper and suspend it from the bodywork without disconnecting the flexible hose.
- the track rod ball joint using extractor 8.0703 E.
- the securing pivot of the anti-roll bar connecting link on the rear triangle arm.
- the rear triangle arm pivot by tapping to disengage the splined part.
- the silentbloc nut securing the front arm to the rear arm.

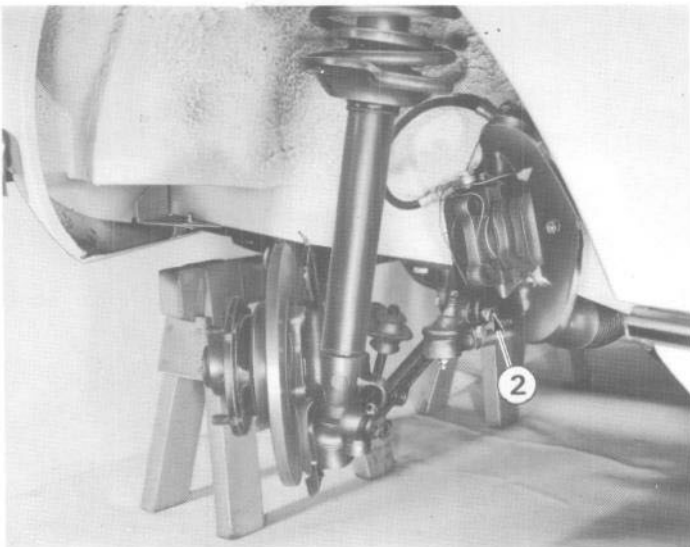


- Place a jack under the wheel hub.
- Remove the three bolts securing the upper spring holder to the wing valance.
- Hold the spring on one of its coils.
- Lower the jack and remove the element from the car.

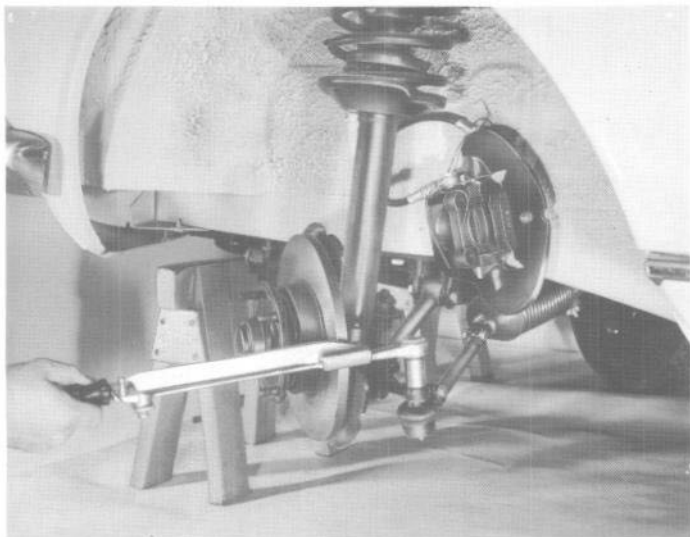
## FRONT SUSPENSION REFITTING A SUSPENSION ELEMENT



- Position the upper holder so that the safety cup lies parallel with the car axis.
- Place the element on a trolley jack fully lowered.
- Position the element under the front wing.
- Raise the assembly aligning the securing holes
- Secure the suspension element using three bolts 1 equipped with new double tooth washers. Tightening torque 7.2 ft.lbs (1 m.kg).



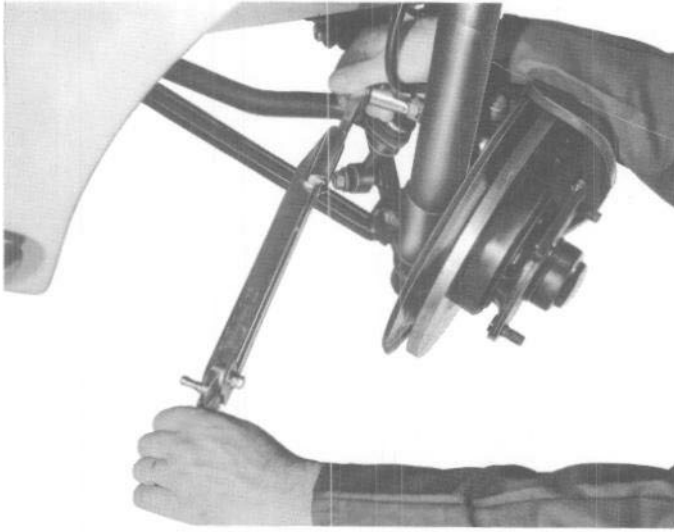
- Remove the jack.
- Fit the following parts on the front arm in the indicated order :
  - the thrust washers,
  - the cup,
  - the half silentbloc.
- Then fit the arm thus equipped in the rear arm eye and mount in the following order :
  - the silentbloc second half,
  - a new nylstop nut.
- Engage the pivot 2 of the rear triangle arm the head pointing rearwards and flush with the splines.
- Fit a new nylstop nut but do not tighten yet.



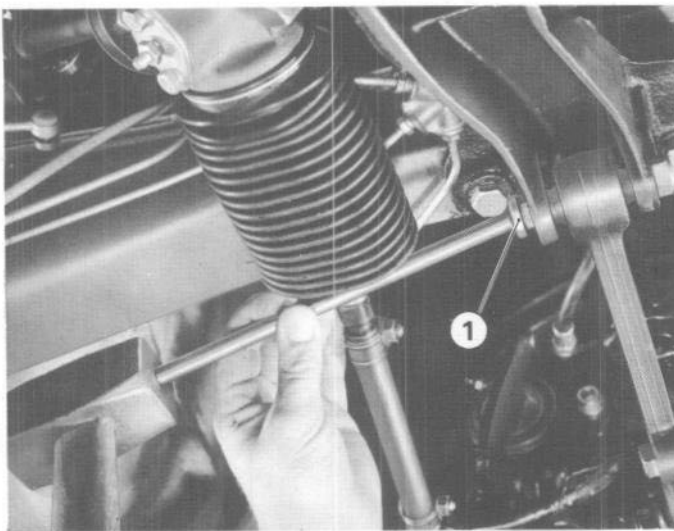
- Refit the anti-roll bar connecting link on the rear arm, by engaging the pivot with top facing rearwards.
- Place a washer and a nut without tightening the latter.
- Couple the track rod with the track arm.
- Ensure that the pin hole is perpendicular to the rod axis.
- Tighten the ball joint nut equipped with a new Blocfor washer. Tightening torque 33 ft.lbs (4.5 m.kg).
- Fit a split pin.

FRONT SUSPENSION  
REFITTING A SUSPENSION ELEMENT

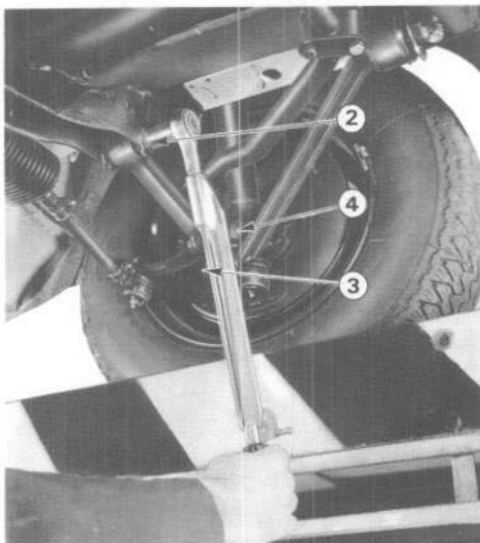
9 0203<sup>(1)</sup>



- Refit brake caliper.
- Tighten the bolts equipped with new Blocfor washers. Tightening torque 51 ft lbs (7 m.kg).
- Refit the wheel.
- Tighten the wheel nuts to 43.5 ft lbs (6 m.kg).
- Rest the vehicle on its wheels.



- Push the car over a pit or onto a car lift.
- Fit the rear articulation pivot 1.



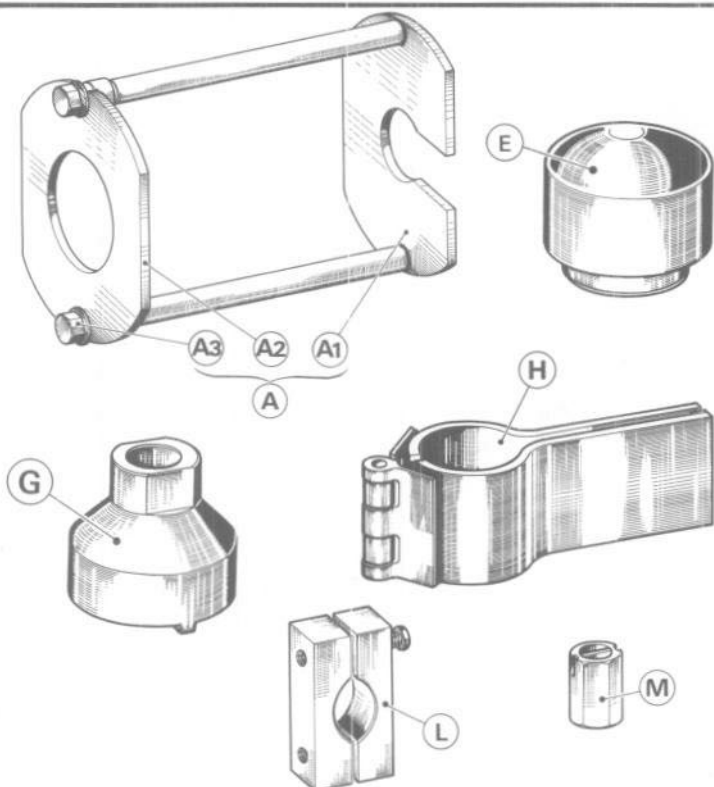
- Using a torque wrench tighten the following to 33 ft lbs (4.5 m.kg) :
- pivot nut 2 on cross member,
- silentbloc nut 3,
- nut 4 securing anti-roll bar connecting link to rear arm.

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FRONT SUSPENSION  
DISMANTLING - REFITTING A SUSPENSION ELEMENT

9 0301<sup>(1)</sup>



TOOLS TO BE USED

8.0906

Tool chest for front and rear suspension.

A - Front and rear springs compressor comprising of :

A1 - Lower clamp assembly

A2 - Upper clamp

A3 - Set of two operating screws

E - Lower needle bearing seal fitting drift.

G - Front shock absorber closing nut socket wrench.

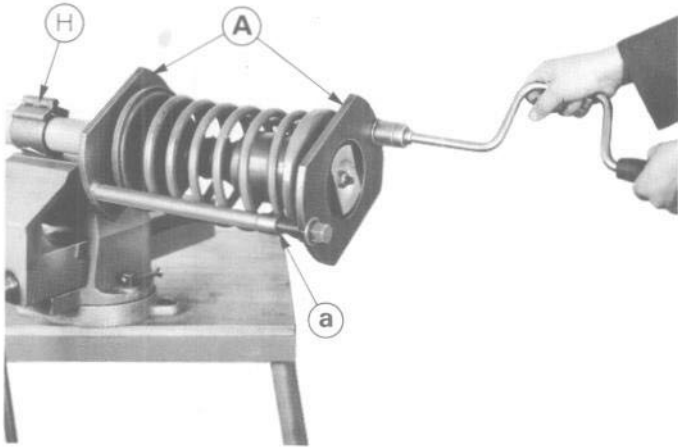
H - Holder

L - Front shock absorber rod holding clamp.

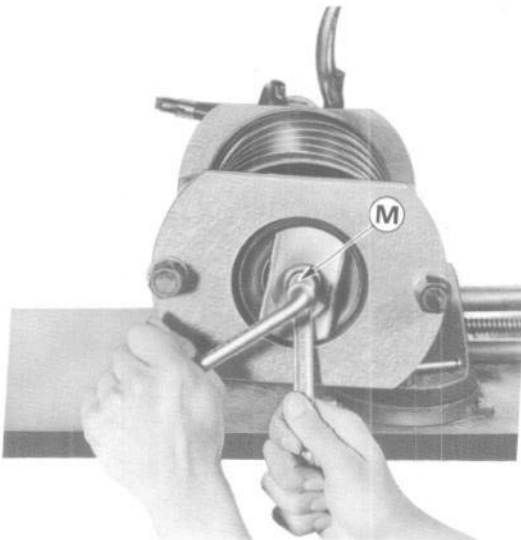
M - Front shock absorber rod holding socket.

## FRONT SUSPENSION

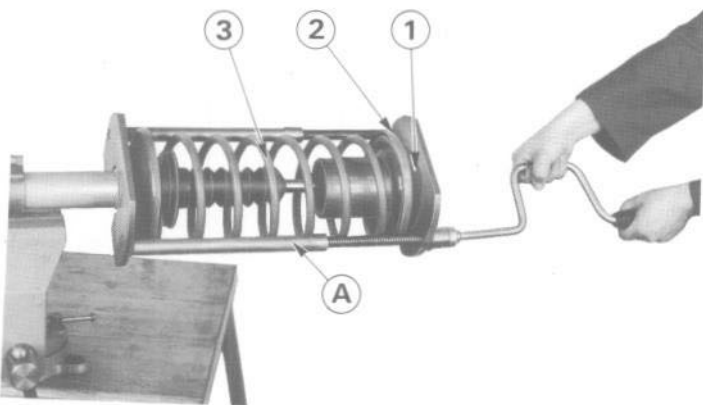
### DISMANTLING OF A FRONT SUSPENSION ELEMENT



- Hold the suspension element horizontally in a vice using holder H.
- Fit the compressor A over the suspension spring.
- Alternately tighten both operating screws until the spring upper holder comes into contact with the apparatus in a.



- Hold the shock absorber rod using socket M and remove the nut.

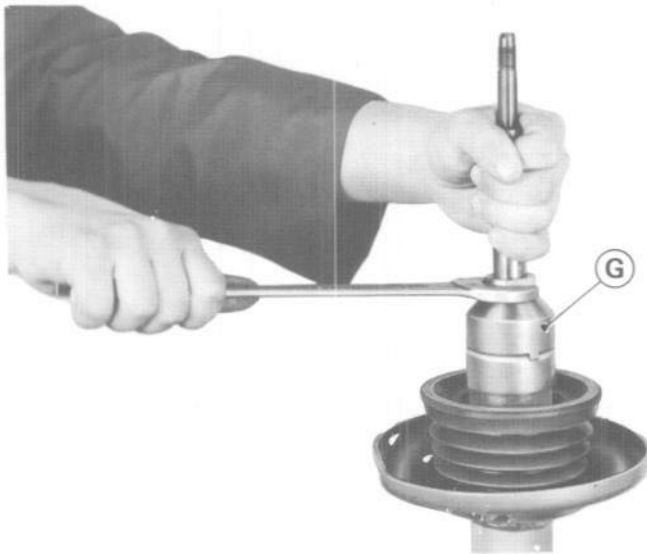


- Slacken both operating screws until spring is fully extended.
- Remove :
  - compressor A,
  - upper holder 1,
  - spring upper cup 2,
  - suspension spring 3.

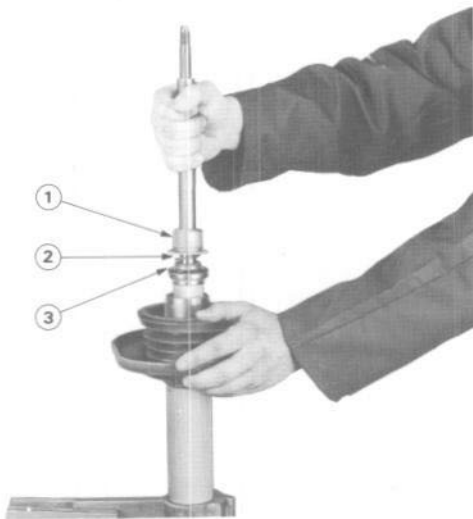


FRONT SUSPENSION  
DISMANTLING OF A FRONT SUSPENSION ELEMENT

9 0303



- Remove the shock absorber rod rubber boot.
- Hold the suspension element vertically in a vice.
- Remove the shock absorber closing nut using socket G and an open ended spanner.



- Pull rod slowly so that oil does not splash and remove rod and piston assembly.
- Then removing the following from the rod :
  - support cup with rod seal 1.
  - thrust washer and upper spring 2.
  - "O" seal ring of bushing 3.

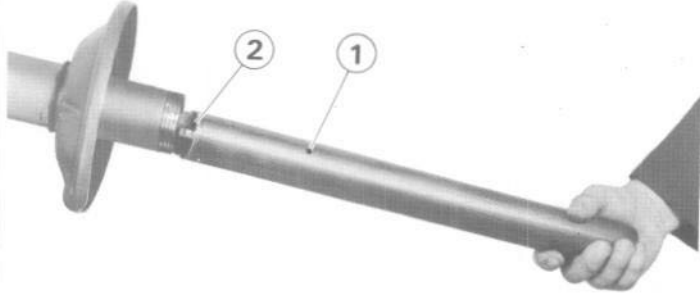


- Remove the rebound block using two tyre levers.

0304

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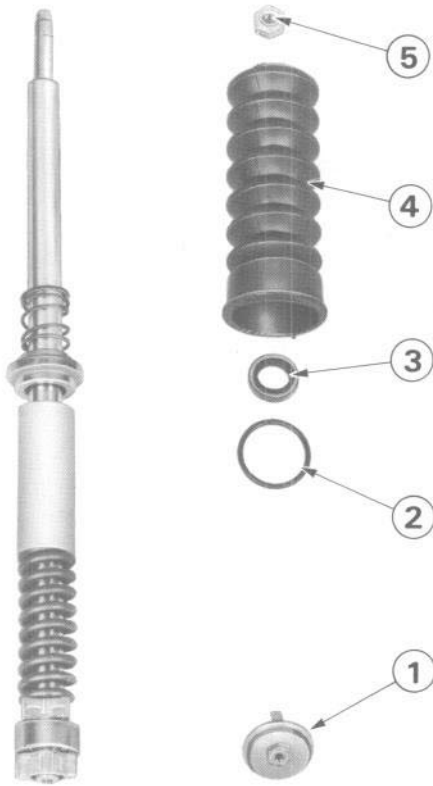
FRONT SUSPENSION  
DISMANTLING A SUSPENSION ELEMENT



- Remove the shock absorber from the vice.
- Remove the oil from the shock absorber body.
- Set aside the shock absorber cylinder 1 and the compensator valve 2.
- Remove the compensator valve.

FRONT SUSPENSION  
REFITTING A FRONT SUSPENSION ELEMENT

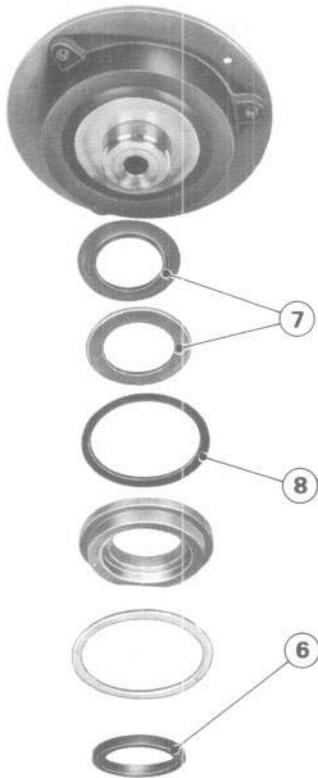
9 03 11<sup>(2)</sup>



- Use clean and faultless parts.
- The following parts **must** be replaced at each dismantling operation :

**Shock absorber**

- Valve compensator assembly 1 if necessary.
- "O" seal ring of bushing 2.
- Rod seal 3.
- Rubber boot 4.
- Nylstop nut 5.

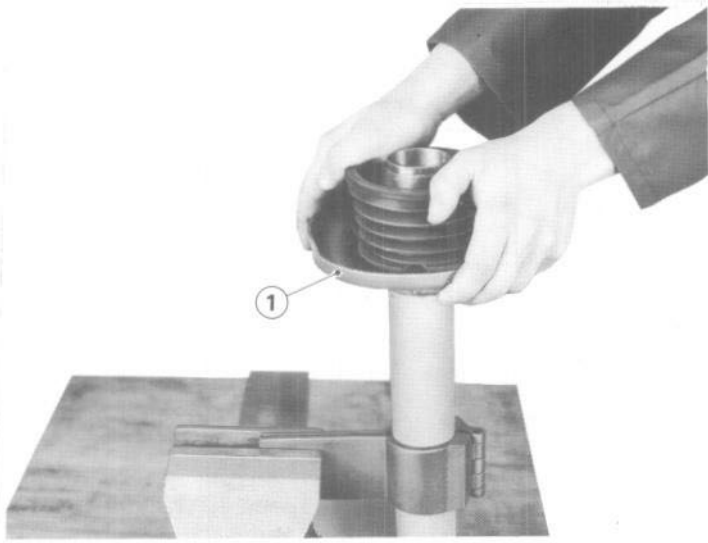


**Upper Support**

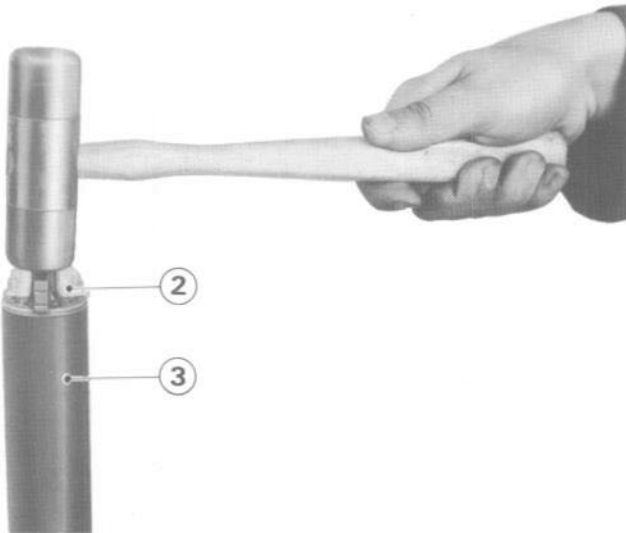
- Lower rubber seal 6.
- Needle bearing 7 if necessary.
- Seal ring of needle bearing 8.

## FRONT SUSPENSION

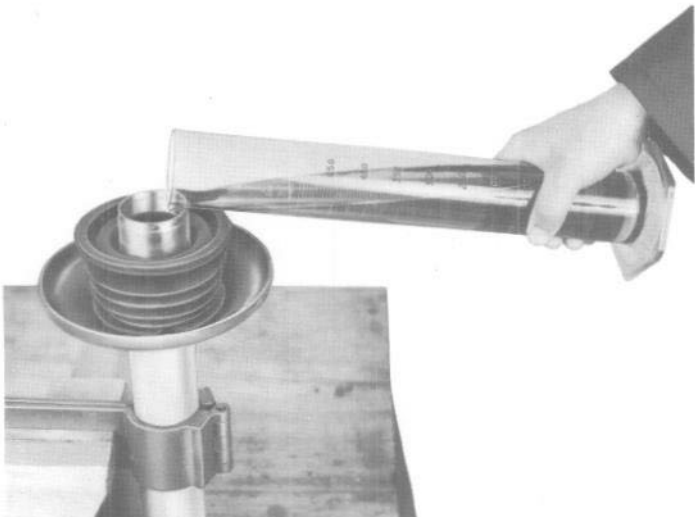
### REFITTING OF A FRONT SUSPENSION ELEMENT



- Using support **H**, hold the shock absorber body vertically in a vice.
- Smear tallow over the threads and the shock absorber body upper part.
- Fit the rebound block 1.



- Insert compensator valve 2 in the shock absorber cylinder 3 by tapping gently with a mallet.
- Blow carefully these parts as well as the inner part of the shock absorber body.



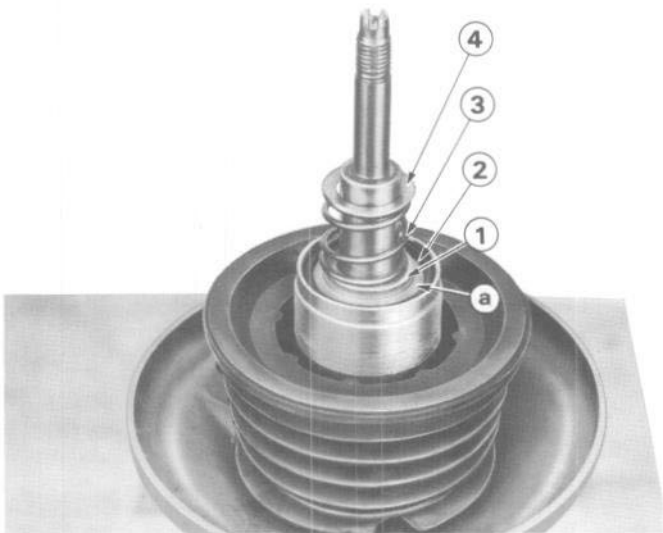
- Place the cylinder assembly in the shock absorber body.
- Fill a graduated test tube with 300 cm<sup>3</sup> of **ESSO OLEOFLUID 40X**.
- Pour this amount into the shock absorber body.

FRONT SUSPENSION  
REFITTING A FRONT SUSPENSION ELEMENT

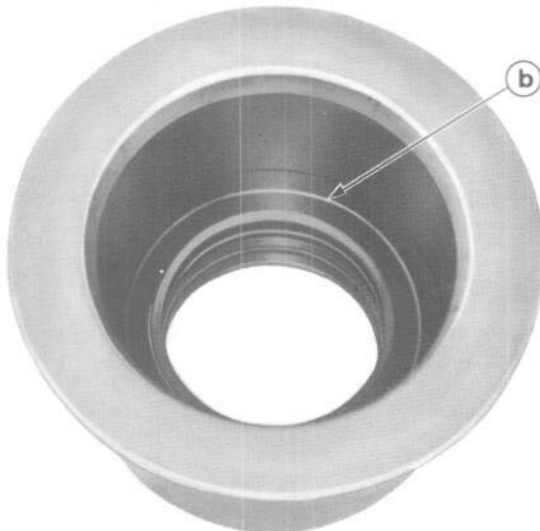
9 0313



- Gradually insert the mechanism into the cylinder to avoid any loss of oil.



- Ensure correct engagement of the upper bush 1. Face a must have a clearance of three mm with regard the shock absorber body.
- Fit the new "O" seal ring 2 tallowed.
- Install the following on the shock absorber rod:
  - upper spring 3,
  - thrust washer 4 with domed side facing spring

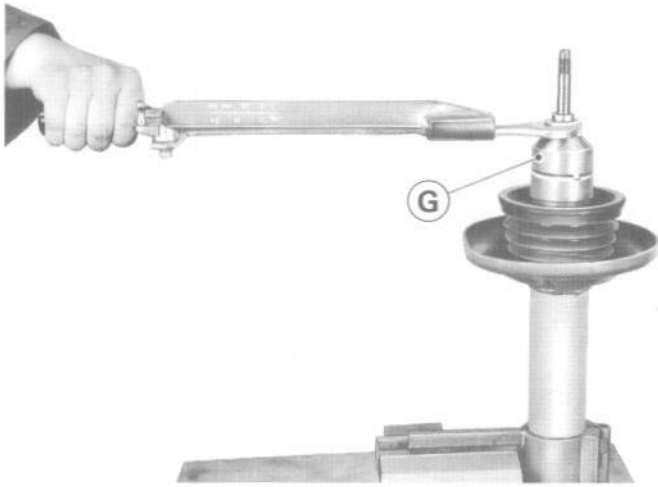


- Smear tallow over the new rod seal.
- Insert the seal in the cup in order that edge b is visible.

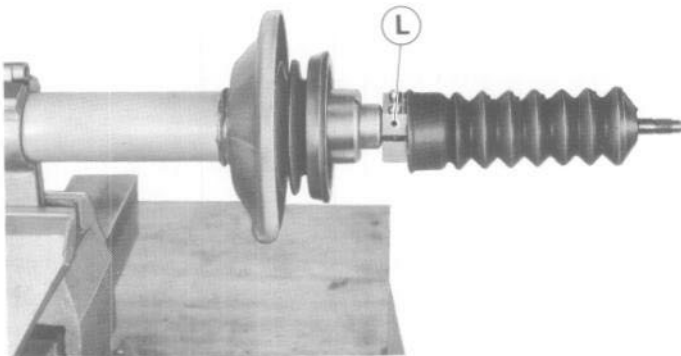
PEUGEOT

## FRONT SUSPENSION

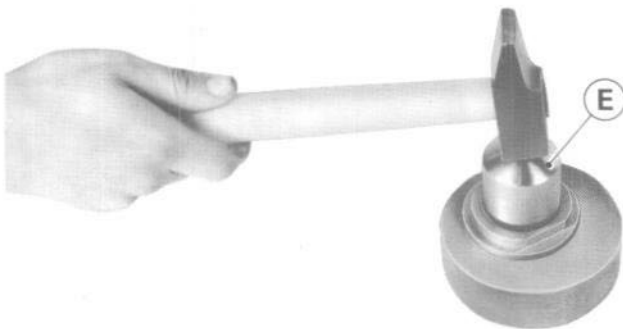
### REFITTING A FRONT SUSPENSION ELEMENT



- Carefully fit the cup equipped with its seal on the rod. Engage it until the thrust washer comes into contact with the spring.
- Fully tighten the closing nut on the body and tighten to **58 ft.lbs (8 m.kg)** using socket **G**.
- Hand check the rod rotation and displacement.



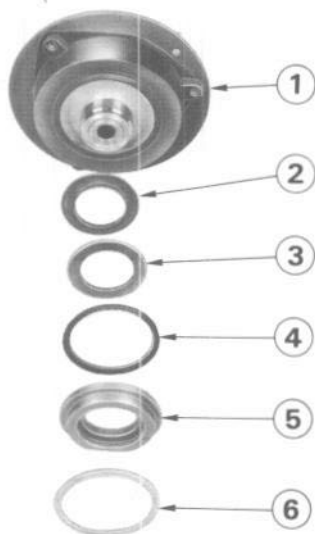
- Pull the shock absorber rod fully out.
- Fit clamp **L** on the rod as indicated on drawing opposite. Tighten firmly using two screws.
- Install rubber boot on the shock absorber rod.
- Hold suspension element horizontally in a vice.



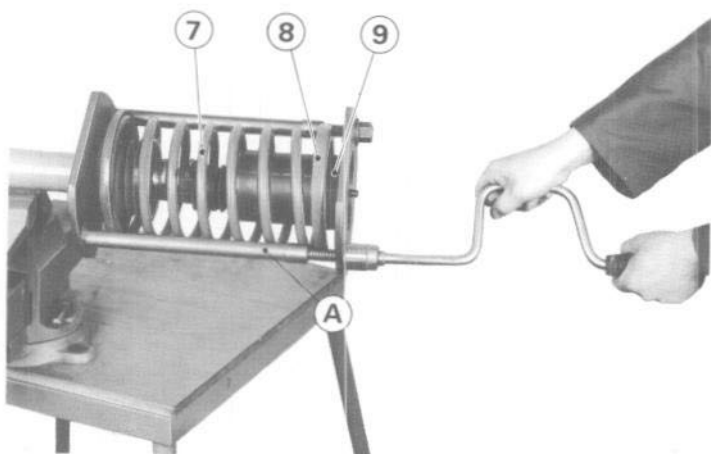
- Place rebound buffer thrust ring on a lead base with the seal recess facing upwards.
- On drift **E**, place seal ring with its lips pressed against the drift.
- Fit the seal by tapping on the drift until the seal bottoms.

FRONT SUSPENSION  
REFITTING A FRONT SUSPENSION ELEMENT

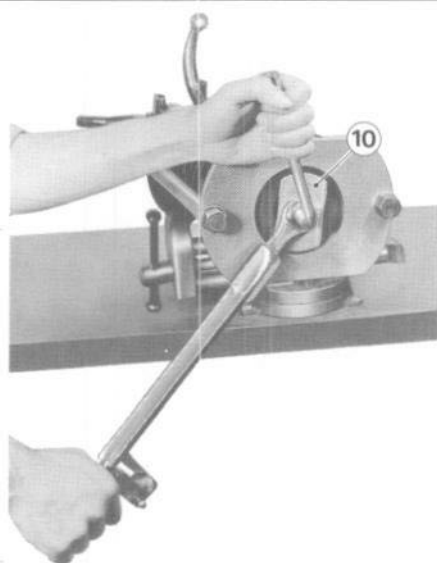
9 0315



- Amply grease the needle thrust bearing using ESSO MULTIPURPOSE GREASE H.
- Place the following on the upper spring holder 1 :
  - thrust plate 2 with its collar facing downwards,
  - needle bearing 3, with the needles facing upwards,
  - bearing oil seal 4 with the big lip pointing downwards,
  - bearing thrust plate 5, its seal facing downwards,
  - Shim 6.



- Fit the following on the supporting element :
  - suspension spring 7,
  - upper spring cup 8,
  - upper holder assembled 9.
- Hold this assembly using compressor A.
- Compress the spring by tightening alternately both operating bolts. Ensure free engagement of the shock absorber rod in the Support recess.



- Fit safety cup 10 with its tab in the Support groove.
- Fit a new Nylstop nut and tighten to 33 ft.lbs (4.5 m.kg) while holding the rod with socket M
- Remove :
  - spring compressor A,
  - rod holding clamp L,
- Engage rod rubber boot over the closing nut.

PEUGEOT

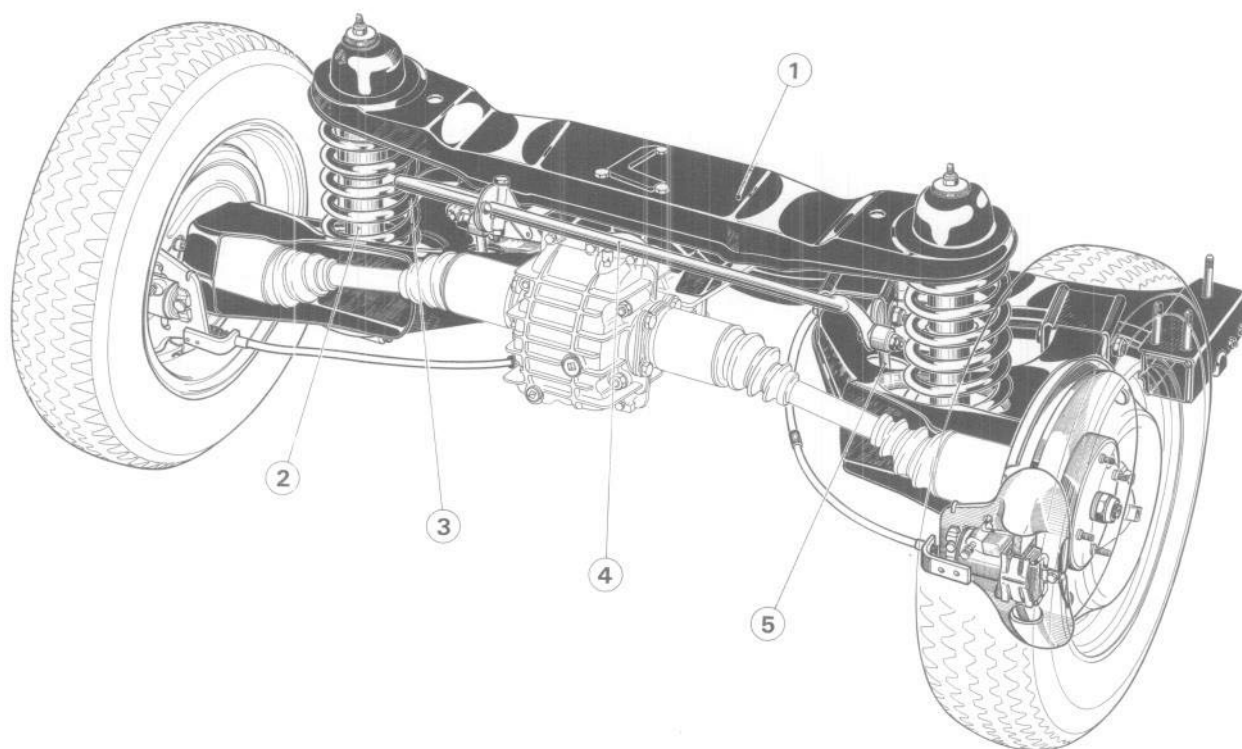
[www.504.org](http://www.504.org)



REAR SUSPENSION  
IDENTIFICATION AND CHARACTERISTICS

9

1101<sup>(1)</sup>



- 1 - Suspension crossmember
- 2 - Shock absorber
- 3 - Suspension spring
- 4 - Anti-roll bar
- 5 - Anti-roll bar connecting link

11 02

9

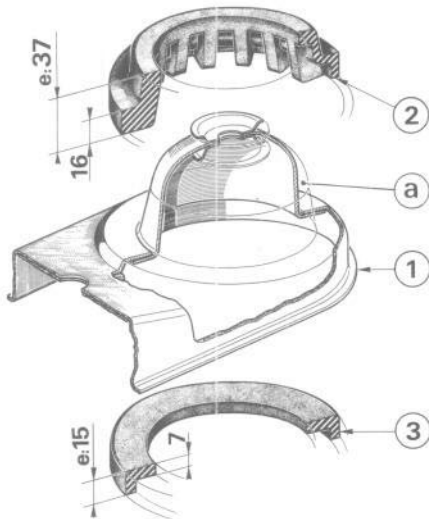
REAR SUSPENSION  
IDENTIFICATION - CHARACTERISTICS

REAR SPRINGS

MODELS	Flexibility mm/100 kg	Coil dia in mm	Outer dia of the last coil in mm	Free Height in mm	Height under load 318 kg in mm	Reference	P.N.
<b>Saloons</b> 504 A01 } 504 A02 } as from 504 A03 } beginning } of series	26	15.75	135.75	412	324.5 to 329.5	1 yellow and 1 green	5101.89
					329.5 to 334.5	1 blue and 1 white	5101.90
<b>Convertibles-Coupés</b> 504 B02 } 504 C02 } as from } beginning } of series	22.5	15.75	135.75	377	300.5 to 305.5	1 red and 1 yellow	5101.93
					305.5 to 310.5	1 green and 1 blue	5101.94

REAR SUSPENSION  
IDENTIFICATION AND CHARACTERISTICS

9 1103



SUSPENSION CROSSMEMBER

1st FITTING

Up to serial numbers :

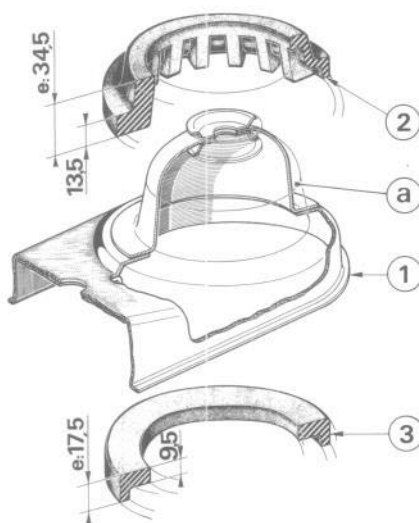
504 A01 - 1 007 476

504 A02 - 1 004 862

The shock absorbers securing cups (a) are welded at the lower part of the suspension crossmember 1.

2 - Suspension crossmember spacer, thickness 37 mm.

3 - Rubber seating cup, thickness 15 mm.



2nd FITTING

As from serial numbers :

504 A01 - 1 007 477

504 A02 - 1 004 863

The shock absorbers securing cups (a) are welded at the upper part of the suspension crossmember 1.

2 - Suspension crossmember spacer, thickness 34.5 mm.

3 - Rubber seating, thickness 17.5 mm.

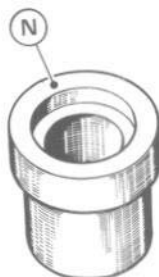
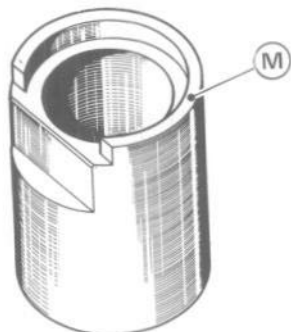
INTERCHANGEABILITY

The parts of the 2nd fitting can be mounted as an assembly on cars manufactured prior to this modification but they are not interchangeable separately with the parts of the 1st fitting.

[www.504.org](http://www.504.org)

REAR SUSPENSION  
REAR SHOCK ABSORBERS

9 15 01



TOOLS TO BE USED

8.0907

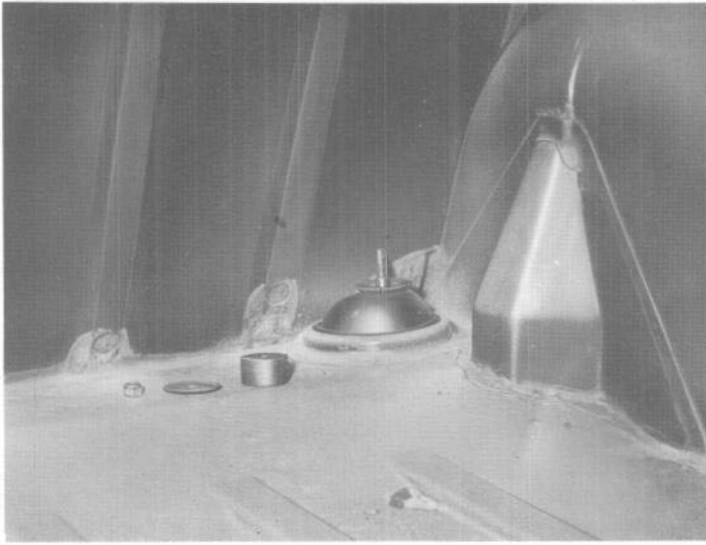
Tool chest for front and rear flexible bushings.

M - Fitting and removal tool for rear shock absorber lower silentbloc.

N - Fitting and removal drift for rear shock absorber lower silentbloc.

## REAR SUSPENSION

### REAR SHOCK ABSORBERS



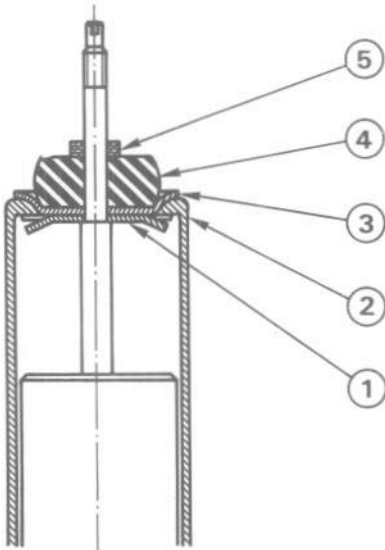
#### REMOVAL

a - Inside the boot on the suspension cross member.

- Slacken the Nylstop nut while holding shock absorber on the flat surface using a 5 mm open ended spanner.
- Remove the upper sheet metal cup and the rubber washer.

b - On rear arm

- Remove the lower securing pivot.
- Remove the shock absorber by disengaging it from the hole provided in the rear arm.



#### REFITTING

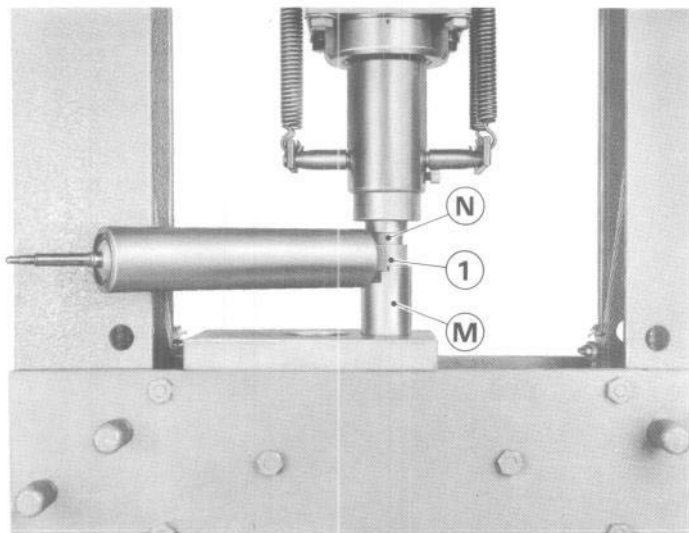
- At each dismantling operation replace the following parts :

- the rubber washers,
- the upper sheet metal cup,
- the nylstop nut.
- Fully extend the shock absorber rod.
- Fit the following parts on the rod :
  - thrust cup 1,
  - rod protector 2,
  - centering cup 3,
  - rubber washer 4,
  - nylon spacer 5.



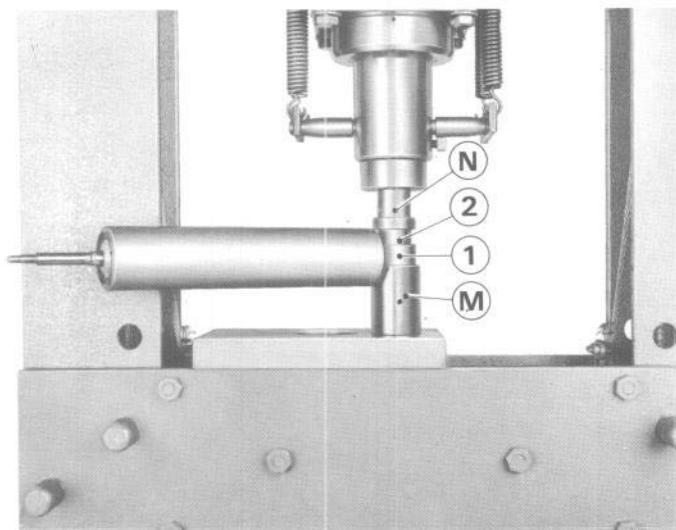
- Engage the shock absorber in its recess with the rod positioned in the suspension cross member hole.

- Fit the lower securing pivot using a new Bloc-for washer and engage the nut without tightening
- Place the following on the shock absorber rod :
  - rubber washer,
  - the upper sheet metal cup raised edge facing upwards,
  - Nylstop nut tightening torque **9 ft.lbs (1.25 m.kg)**
- Tighten the shock absorber lower pivot securing nut to **33 ft.lbs (4.5 m.kg)**.



### REPLACEMENT OF A FLEXIBLE BUSHING REMOVAL

- Assemble the following on the press base plate :
  - fitting tool M,
  - shock absorber eye 1,
  - removal drift N with the smaller diameter pointing towards the shock absorber.
- Lower the piston until the silentbloc falls inside tool M.



### REFITTING

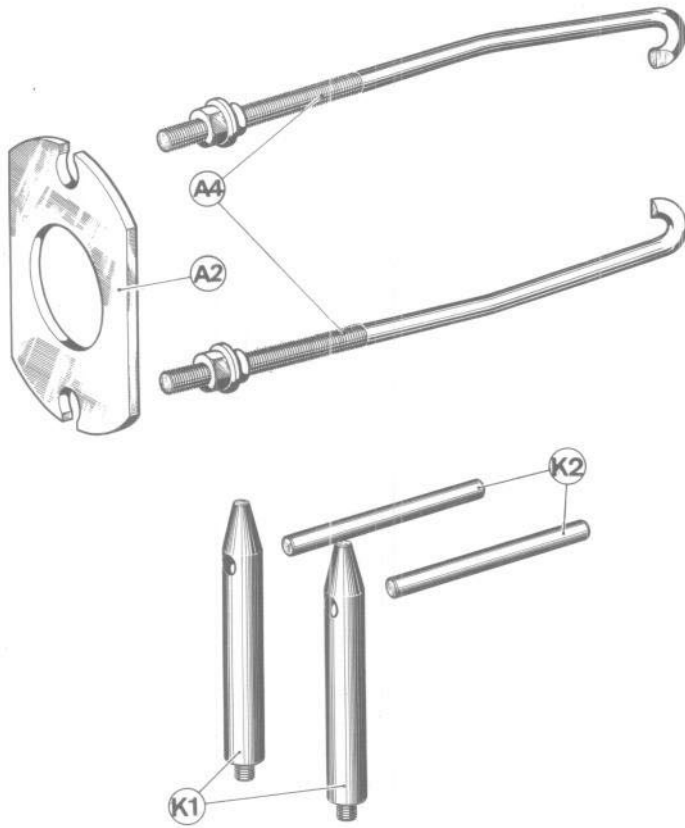
- Smear the silentbloc outer surface and the shock absorber eye bore with tallow.
- Assemble the following on the press base plate :
  - fitting tool M,
  - shock absorber eye 1,
  - new silentbloc 2 with chamfer pointing towards shock absorber eye.
  - fitting drift N with its greater diameter pointing towards the shock absorber.
- Lower piston, using the press, until drift N comes into contact with shock absorber eye.
- Correct positioning of the silentbloc is ensured by the shape of drift N





REAR SUSPENSION  
SUSPENSION CROSS-MEMBER

9 1701



TOOLS TO BE USED

8.0906

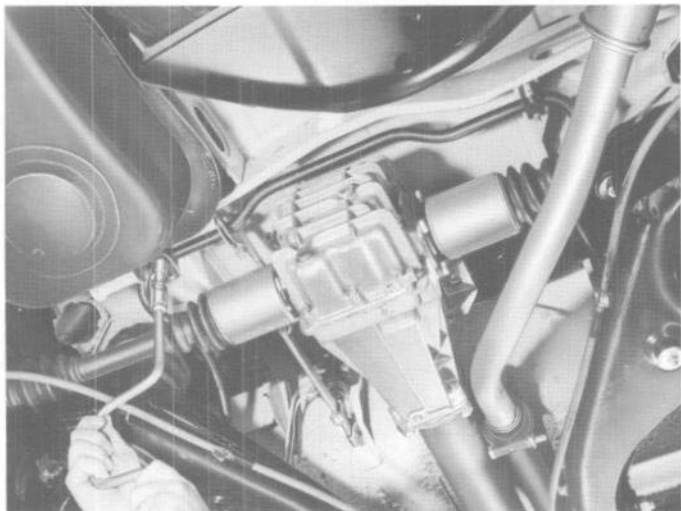
Tool chest for front and rear suspension.

A - Rear spring compressor tool comprising of :  
A2 - Upper clamp  
A4 - Set of two rods with nuts

K1 - Set of two guide rods for rear cross-member.

K2 - Set of two bars.

## REAR SUSPENSION SUSPENSION CROSS-MEMBER



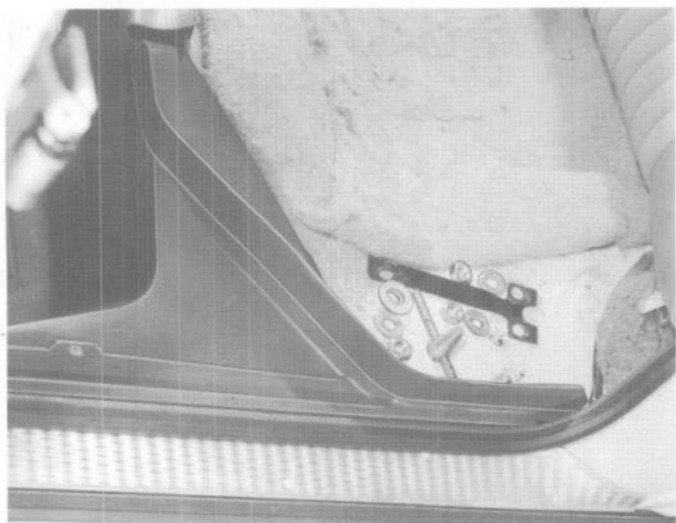
### REMOVAL

#### A - On car

- Place car over a pit or a car lift.
- Remove the rear nut securing the exhaust pipe under the bodywork.
- Remove the two securing clamps of the anti-roll bar flexible bushings and disengage the bar from the bodywork.
- Remove the two Allen screws securing the differential to the suspension cross-member. Rest the rear part of the connecting tube on rear cross-member.
- Slacken the rear arm pivot nuts.
- Remove the petrol line rear securing clamp.



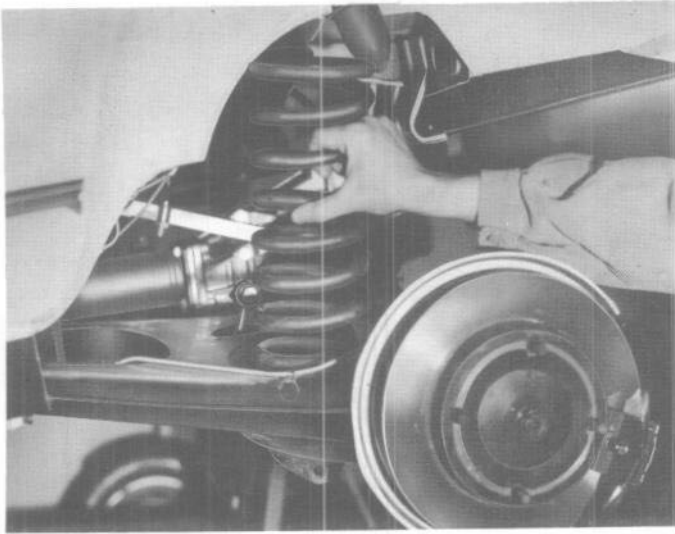
- Place a jack under the cross-member left hand lateral bracket.
- Remove the rear seat cushion.
- Unlock the three securing nuts of the cross-member.
- Remove the front securing nut.
- Raise the lock washer.
- Remove the plastic plug from the guide hole.
- Fully tighten guide rod 8.0906 K1 in the hole. Tighten using bar K2.



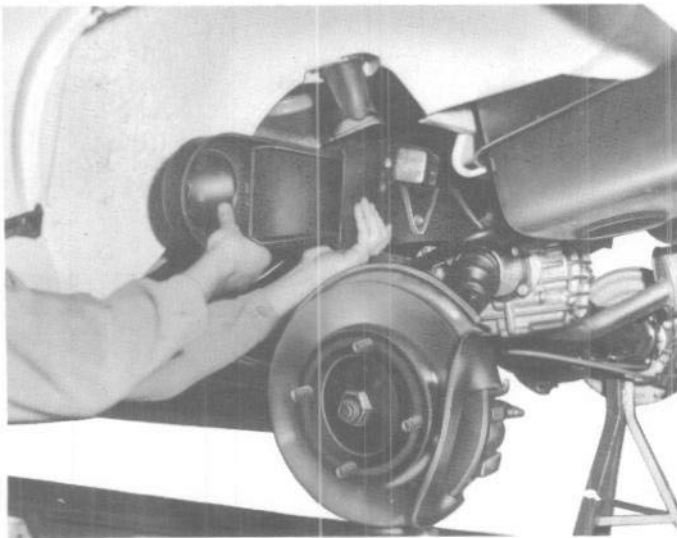
- LEAVE THE BAR IN THE GUIDE HOLE
- Remove the cross-member rear securing nuts and the thrust washers.
- Lower the cross member until the bar comes into contact with the floor.
- Carry out the same operation on the right hand side.

REAR SUSPENSION  
SUSPENSION CROSS-MEMBER

9 17 03

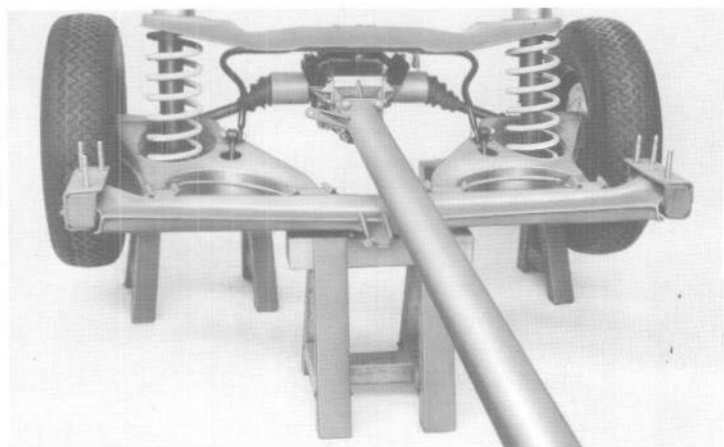


- Raise the car from the rear.
- Chock under the rear arms.
- Remove the wheels.
- Remove the shock absorbers.
- Raise the car until complete disengagement of the springs.
- Remove the springs and their upper rubber cup.



- Remove the suspension cross-member securing nuts from under the body.
- Remove the sheet metal cups and the rubber washers.
- Disengage the cross-member from the bodywork then pull it sideways to avoid contact with the differential.
- Remove the rubber thrust cup.

## REAR SUSPENSION SUSPENSION CROSS-MEMBER



### B - On the mechanical assembly

- Chock the rear axle, under the arms and the cross-member.
- The rear springs are held compressed between arm and cross-member, by the shock absorbers.

**Never unscrew the rear shock absorber upper nut of a mechanical assembly without first compressing the spring.**



- Place apparatus 8.0906 A made up of clamp A2 and rods A4.
- Compress the spring by screwing alternately rod nuts until the shock absorber upper securing rubber washers are freed.



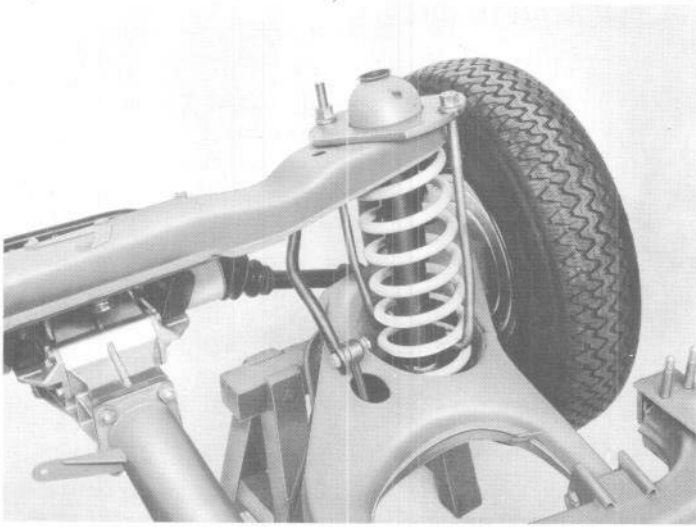
- Slacken the shock absorber upper securing Nylstop nut while holding the rod with a 5 mm open ended spanner.

Remove :

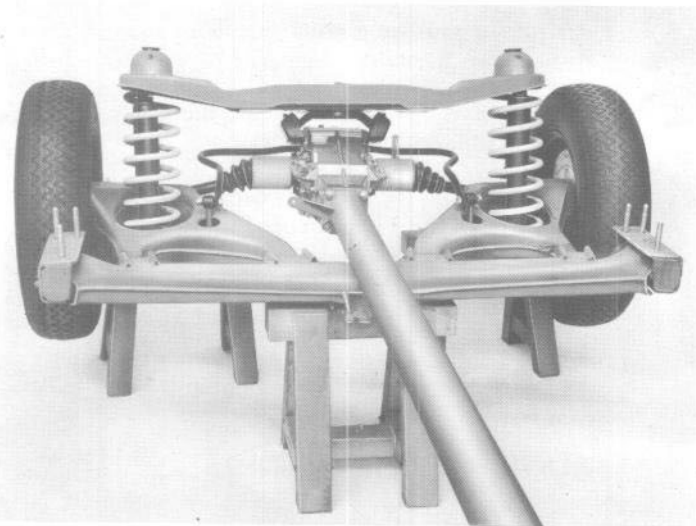
- the upper sheet metal cup,
- the rubber washer.

REAR SUSPENSION  
SUSPENSION CROSSMEMBER

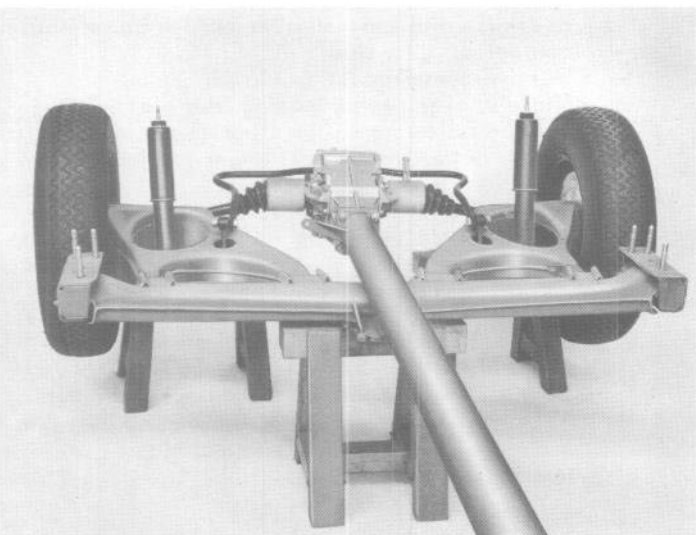
9 17 05<sup>(2)</sup>



- Release the spring by untightening simultaneously rods A4.
- Remove the spring compressor tool.
- Carry out the same operation for the opposite spring.



- Remove both allen screws securing the differential under the suspension crossmember.
- Rest the differential/connecting tube assembly on the rear crossmember.

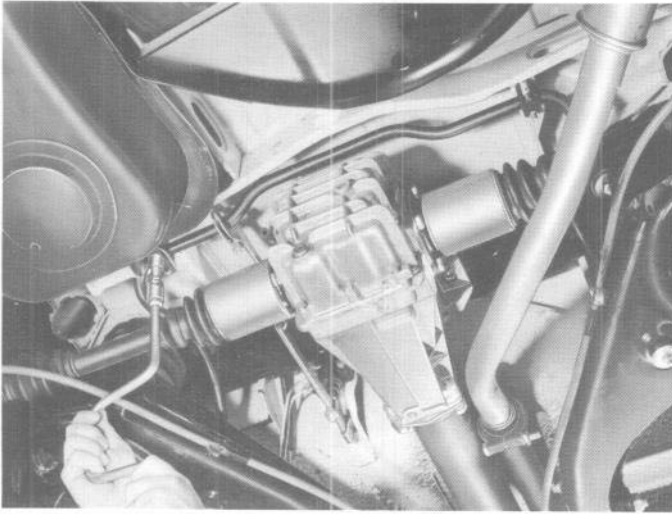


- Remove the suspension crossmember and the rear springs.

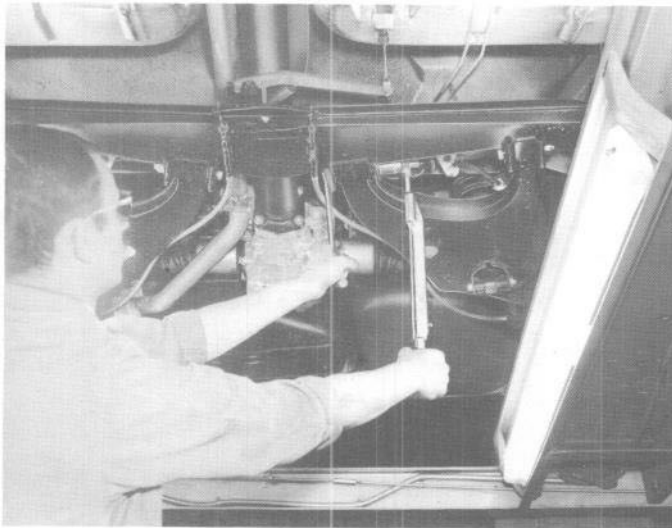


REAR SUSPENSION  
SUSPENSION CROSSMEMBER

9 17 07<sup>(1)</sup>

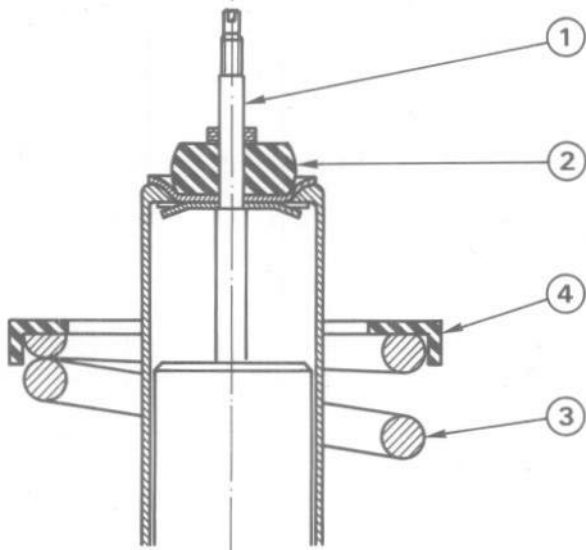


- Secure the differential to the suspension cross-member using two Allen screws equipped with new Blocfor washers.
- Tighten the screws to **27 ft.lbs (3.75 m.kg)**.
- Smear Molykote G over the anti-roll bar bushes.
- Fit and secure the anti-roll bar under the bodywork.
- Install the petrol line rear securing clamp.
- Retighten the rear part of the exhaust pipe to the bodywork.



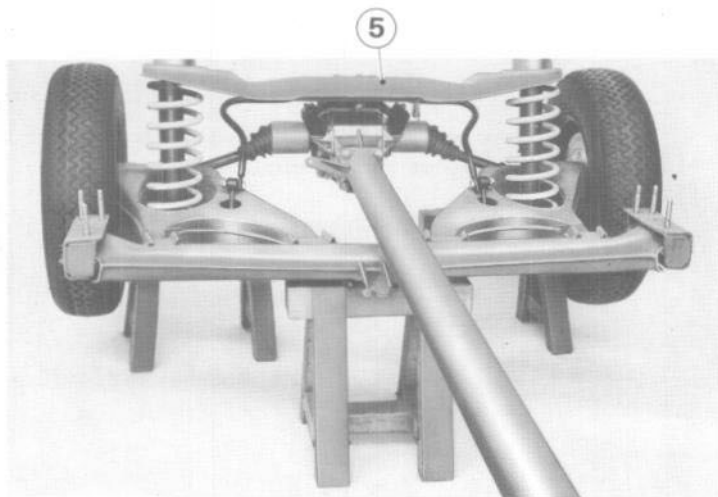
- Seat two persons at the rear in order that the flexible bushes be in neutral position.
- Tighten the following using a torque wrench :
  - the shock absorbers lower pivot nuts to **33 ft.lbs (4.5 m.kg)**.
  - the nuts of the arm flexible bushes to **47 ft.lbs (6.5 m.kg)**.

## REAR SUSPENSION SUSPENSION CROSSMEMBER

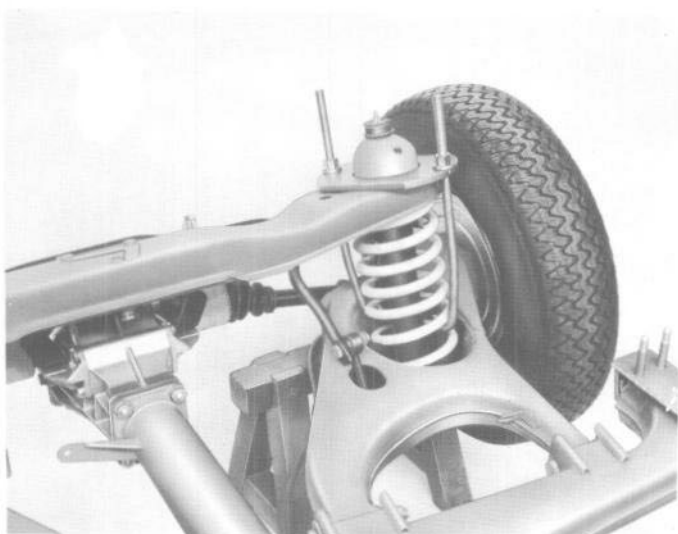


### B - On mechanical assembly.

- Use clean and faultless parts.
- Check differential upper mounting under the suspension crossmember for condition.
- Fully extend shock absorber rod 1.
- Fit a new rubber washer 2 and ensure correct assembly of the parts on the rod.
- Install springs 3 on their supports in the rear arms.
- Then fit the rubber cups 4 smeared with Teepol ensuring for condition of interchangeability (see class 9, page 11 03).



- Place crossmember 5 on the mechanical assembly.
- Secure the differential under the crossmember using two Allen screws fitted with new Ondu-flex washers.
- Hand tighten the two Allen screws. At the time of refitting the mechanical elements on the body they should be tightened to 27 ft.lbs (3.75 m.kg).



- Compress a suspension spring as for removal.
- Fit the following on the shock absorber rod :
  - a new rubber washer,
  - the new sheet metal cup raised edge facing upwards.
  - a new Nylstop nut. Tightening torque 9 ft.lbs (1.25 m.kg).
- Remove the spring compressor tool.
- Carry out the same operation to refit the opposite shock absorber.