



**C2 R2 MAX**

Version 06 – 20 May 2010

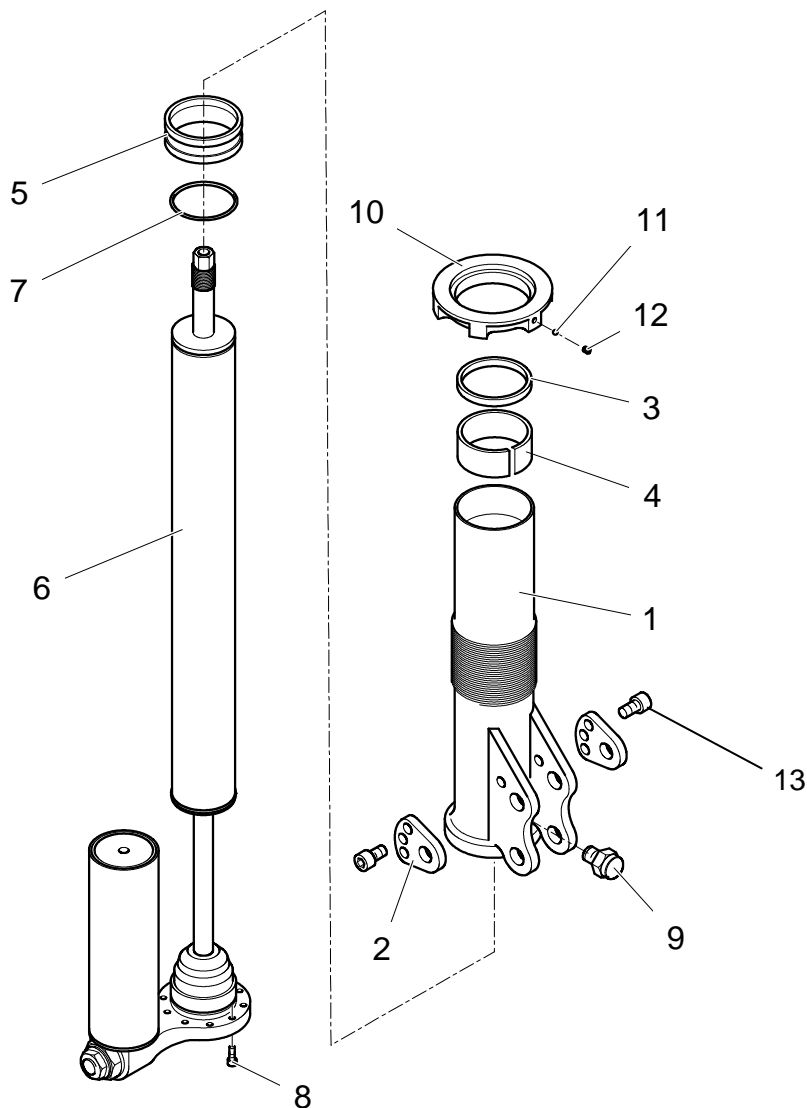
***E14***

***FRONT  
SUSPENSION***



# C2R2MAX

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| Ref | Part number                          | Qty | Description   |
|-----|--------------------------------------|-----|---|
| 1   | 1E1463025C                           | 1   | Right front strut   |
| 1   | 1E1463026C                           | 1   | Left front strut  |
| 2   | 1E1463138A                           | 4   | Snail cam for camber  |
| 3   | PS75592A10                           | 2   | Cartridge spy seal  |
| 4   | CS080003ST                           | 2   | Strut DU bushing  |
| 5   | 1E1462164B                           | 2   | Moving bearing  |
| 6   | <b>Console Asphalt</b><br>1E1463276A | 2   | Body: 1E1463208A<br>Hydraulic <b>Setting1*</b> 1E1463272A   |
|     | <b>Console Gravel</b><br>1E1463277A  |     | Corps : 1E1463210A<br>Hydraulic <b>Setting1*</b> 1E1463274A |
| 7   | CS360204ST                           | 2   | Strut end cap O-ring (for revision)                         |
| 8   | PS82015A10                           | 20  | End cap screw M5x80 Lg25 CI10.9                             |
| 9   | 1E1463034A                           | 2   | Filter  |
| 10  | 1E1463191A                           | 2   | Lower housing nut   |
| 11  | CS740002ST                           | 4   | Polyamide ball Ø5   |
| 12  | PS82505A10                           | 4   | Headless screw  |
| 13  | BCSP691390                           | 4   | Screw CHC M8 L16  |

\* : reference sold along with a body

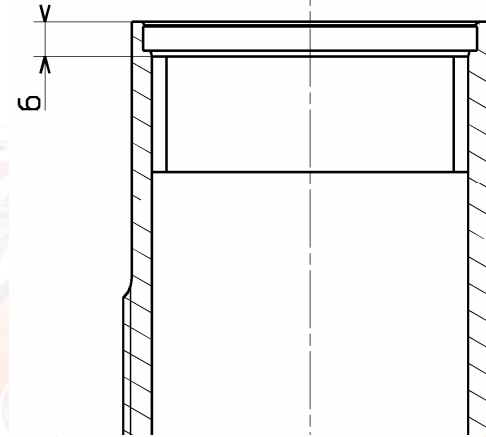
Fitting the filter on the strut.

Fit the filter ([ref. 9](#)) on the strut ([ref. 1](#)).



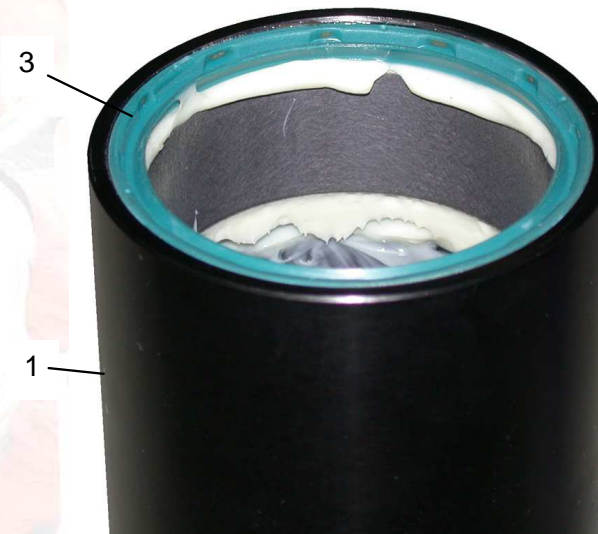


Insert the DU bushing ([ref. 4](#)) using the press, **5mm** from the top of the strut ([ref. 1](#)).



Fit the seal ([ref. 3](#)) on the strut ([ref. 1](#)), with the lip upwards.

Lubricate the DU bushing, ensuring there is plenty underneath so as to create a reserve of grease in the strut.



**KUBLER**

### Assembling the snail cams on the strut.

Each of the snail cam's 3 holes (A B and C) are at a different distance from the  $\varnothing 12$  hole, which allows the camber to be changed very quickly, during use for example.

Conventionally, the "B" hole must correspond to the "standard" camber setting, and is therefore to be used when the axle system is adjusted in the workshop.

Hole "A" will add 20' of camber.

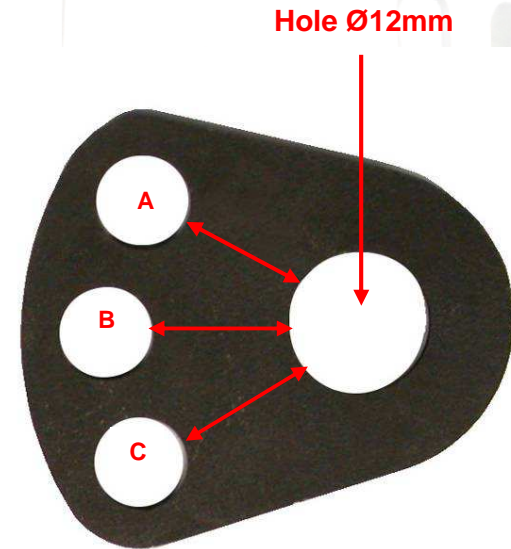
Hole "C" will remove 20' of camber.



**When fitting on the strut, always take care to match up the adjustment holes in front of and behind the strut (direction the snail cam is fitted).**

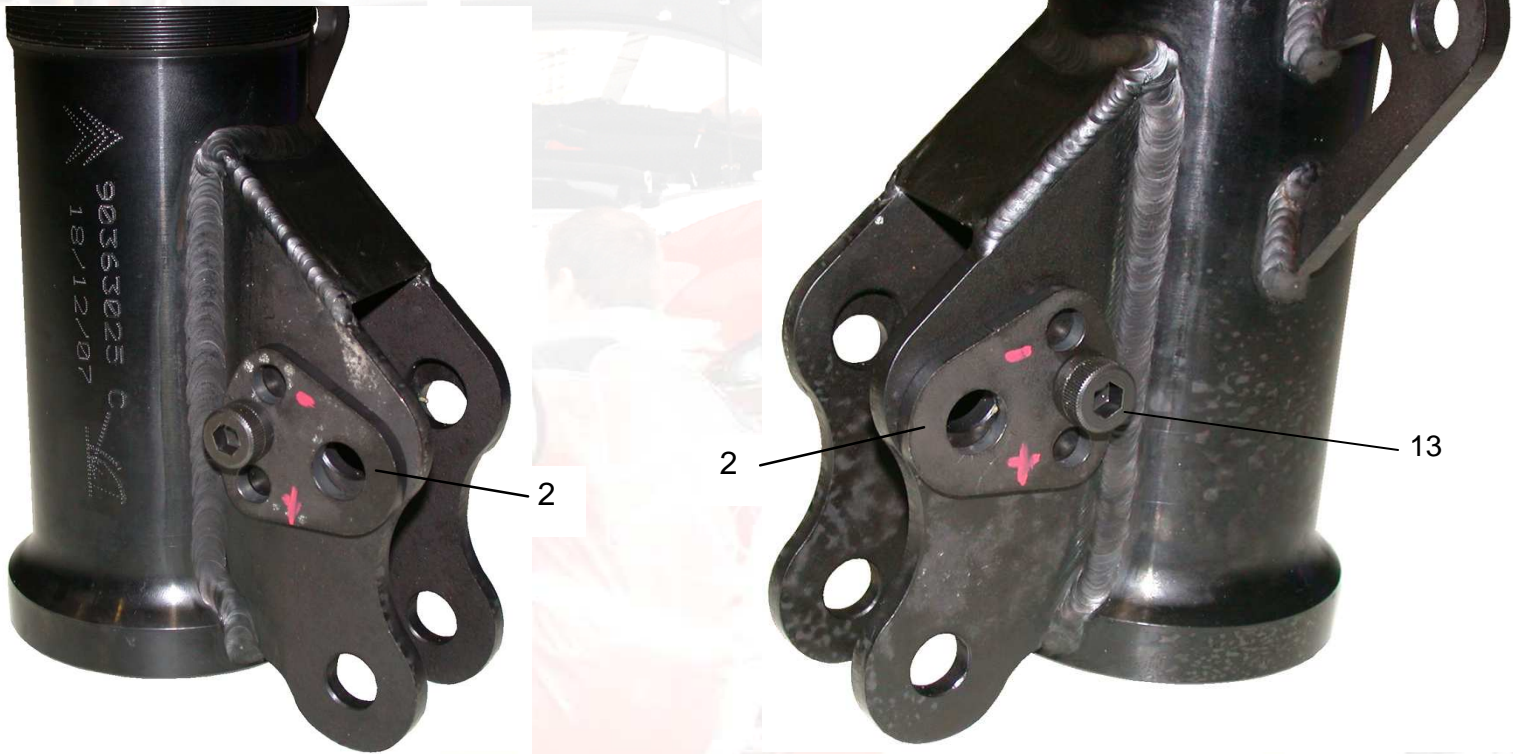
For information and reference :

- A = approx. **11.45mm**
- B = approx. **11.95mm**
- C = approx. **12.50mm**

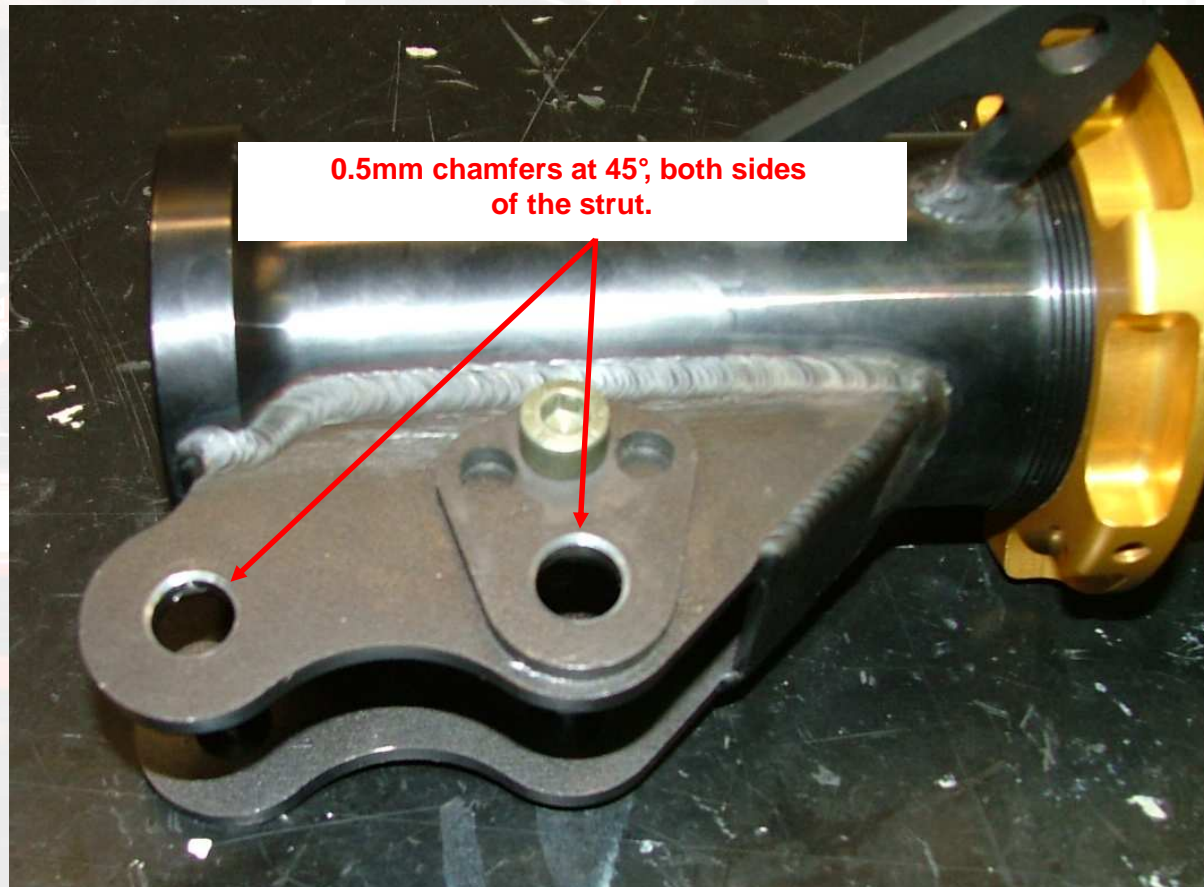




**Result:**



Chamfer the pivot fixing screw holes on both sides, as well as both sides of the camber shims, as shown in the photo below:



0.5mm at 45°

**E14**  
**Front**  
**suspension**

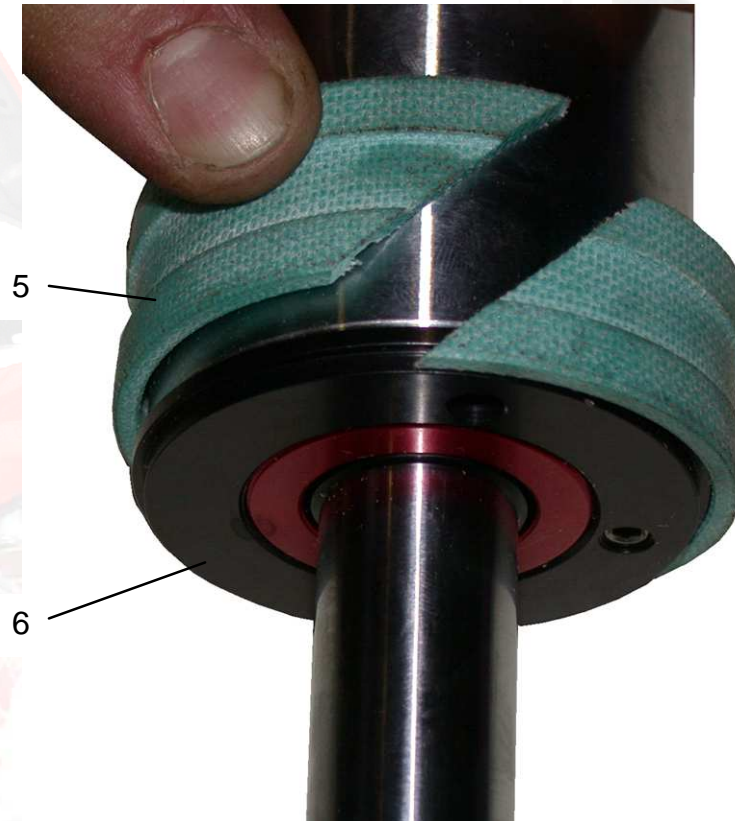


**E**  
**FRONT END**  
**AND REAR END**



## Fitting the moving bearing on the shock absorber.

Fit the moving bearing ([ref. 5](#)) on the shock absorber cartridge ([ref. 6](#)) positioning the groove of the bearing on the shoulder of the cartridge.







Lubricate the exterior groove of the bearing, as shown in the photo opposite.



**KUBLER**

**E14**  
**Front**  
**suspension**

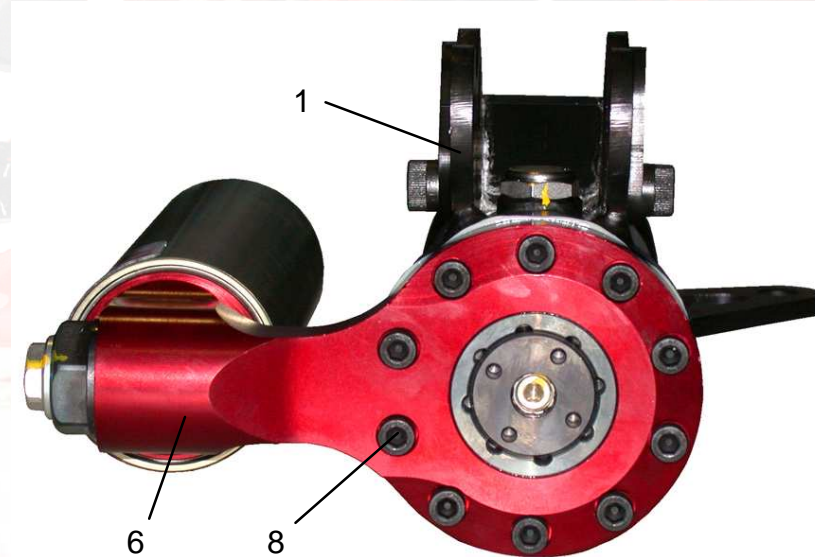


**E**  
**FRONT END**  
**AND REAR END**



Fit the shock absorber ([ref. 6](#)) in the strut ([ref. 1](#)), taking care to respect the position of the shock absorber with regard to the strut (see photo opposite).

Tighten the screws ([ref. 8](#)) to the correct torque.



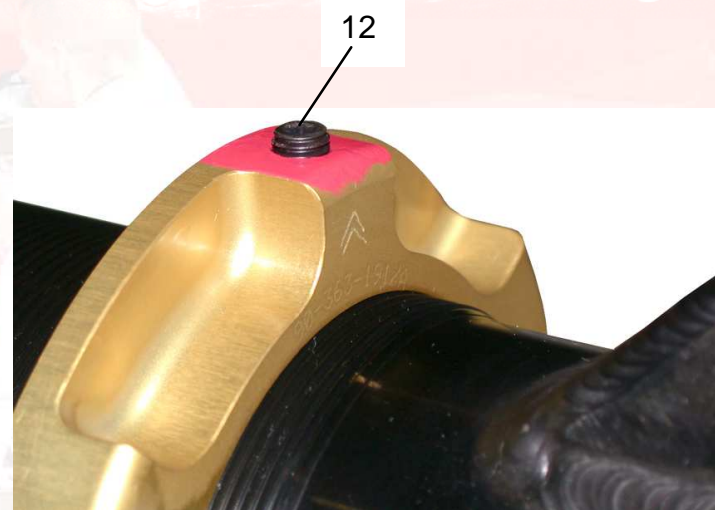
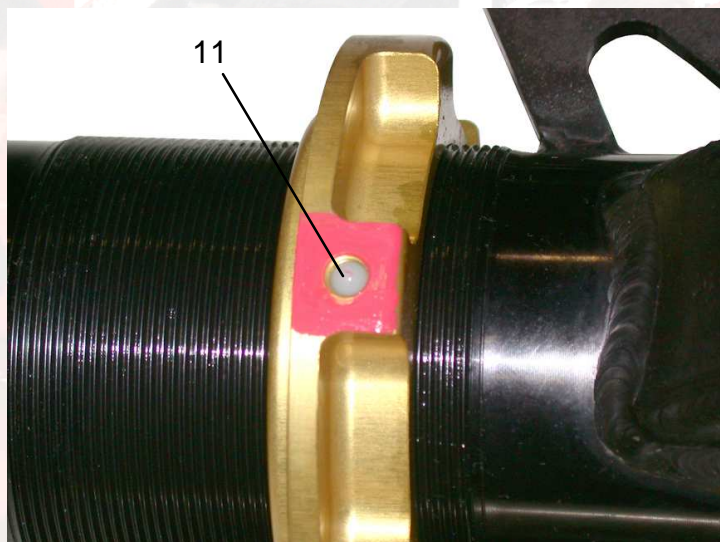
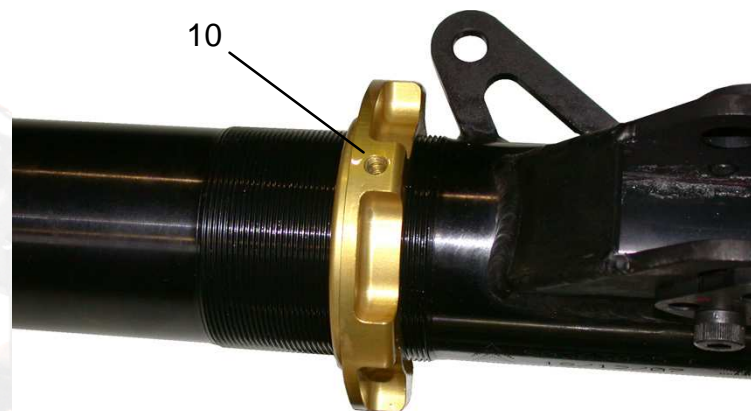
0.8 m.kg



### Fitting the lower housing nut on the strut.

Screw down the lower housing nut (ref. 10) on the strut. Insert the plastic ball Ø5mm (ref. 11) in one of the two holes of the housing nut, and screw in the headless screw (ref. 12) as shown in the 2 photos opposite.

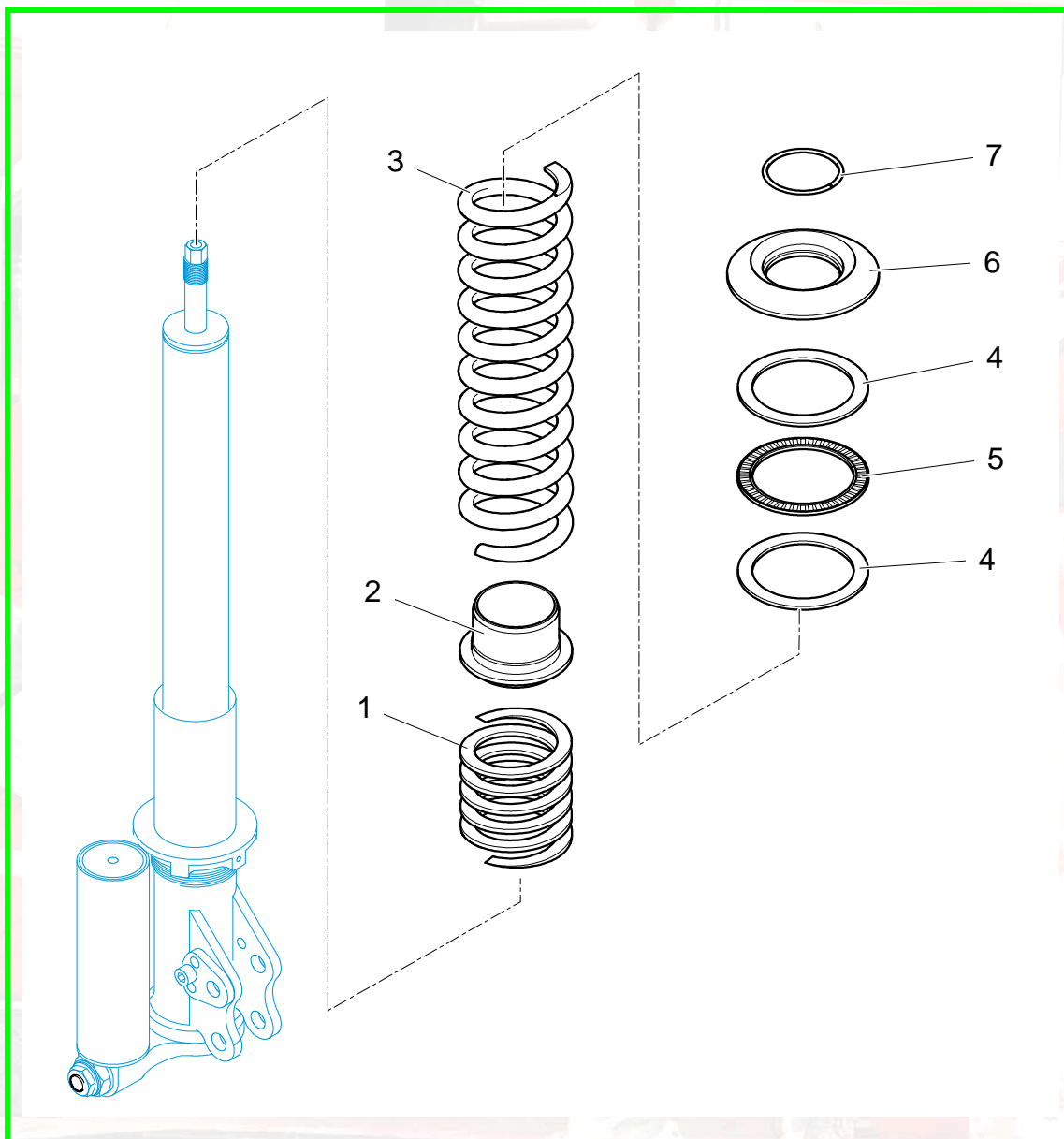
Do not tighten up the headless screw before adjusting the axles and weight per wheel for the vehicle.





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| Rep | Part number | Qty | Description                                 |
|-----|-------------|-----|---|
| 1   | 1E1463020A  | 2   | Helper spring                               |
| 2   | 1E1463017D  | 2   | Middle housing                              |
| 3   | 1E1463175A  | 2   | Spring, asphalt 50 daN ( <i>option</i> )    |
| 3   | 1E1463176A  | 2   | Spring, asphalt 55 daN                      |
| 3   | 1E1463177A  | 2   | Spring, asphalt 60 daN ( <i>option</i> )    |
| 3   | 1E1463165A  | 2   | Spring, dirt track 37 daN ( <i>option</i> ) |
| 3   | 1E1463166A  | 2   | Spring, dirt track 45 daN                   |
| 4   | CS100004ST  | 4   | Thin washer 75x100x1                        |
| 5   | CS100003ST  | 2   | Needle thrust washer d75 D100 E4            |
| 6   | 1E1463016B  | 2   | Upper housing                               |
| 7   | CS060009ST  | 2   | Upper housing ring                          |
|     |             |     |   |
|     |             |     |   |
|     |             |     |   |
|     |             |     |   |
|     |             |     |   |



SHOCK SPRING STIFFNESS TIME TABLE :

| Part Number | Stiffness | Painting marks | Surface | Remark   |
|-------------|-----------|----------------|---------|----------|
| 1E1463177A  | 60 N/mm   | 5 blue         | Tarmac  | Option   |
| 1E1463176A  | 55 N/mm   | 4 blue         | Tarmac  | Kit base |
| 1E1463175A  | 50 N/mm   | 3 blue         | Tarmac  | Option   |
| 1E1463166A  | 45 N/mm   | 2 yellow       | Gravel  | Kit Base |
| 1E1463165A  | 37 N/mm   | 1 yellow       | Gravel  | Option   |

**Nota :** We suggest to engrave, on top of each spring, the stiffness and her position (left or right, to respect the balance)



Painting mark



### Springs and cups assembly.

Poser le ressort compensateur (*rep. 1*) sur la coupelle inférieure, poser la coupelle intermédiaire (*rep. 2*) sur le compensateur, et poser le ressort principal (*rep. 3*) sur la coupelle intermédiaire.







### Fitting the needle thrust washer and the thin washers.

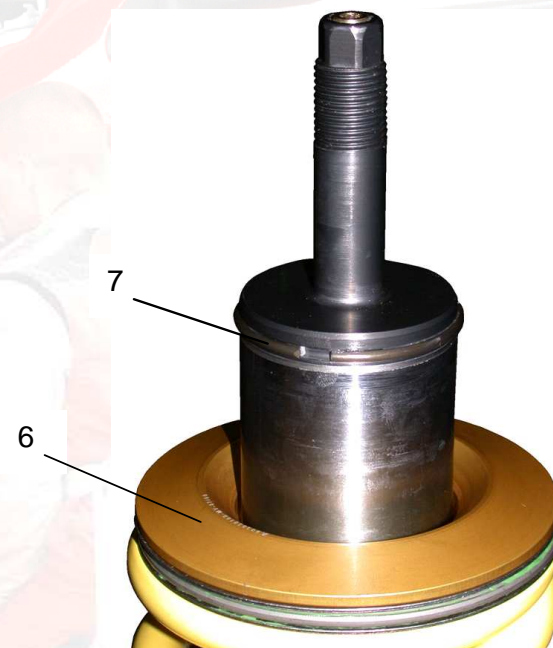
Lubricate the rollers of the needle thrust washer ([ref. 5](#)) with water-repellent grease, and fit a thin washer ([ref. 4](#)) on each side of the thrust washer, as shown in the photo opposite.



Fit the "thrust washer / washers" assembly on the cartridge, against the main spring.

Fit the upper housing ([ref. 6](#)) on the cartridge, against the thin washer.

Fit the retaining ring ([ref. 7](#)) on the cartridge, in the housing provided for this purpose.





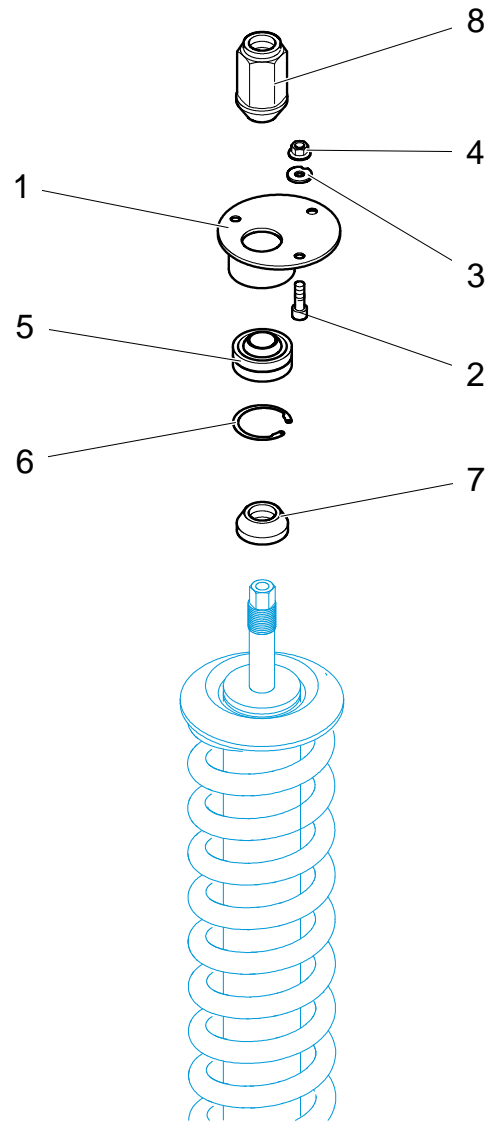






# C2P2MAX

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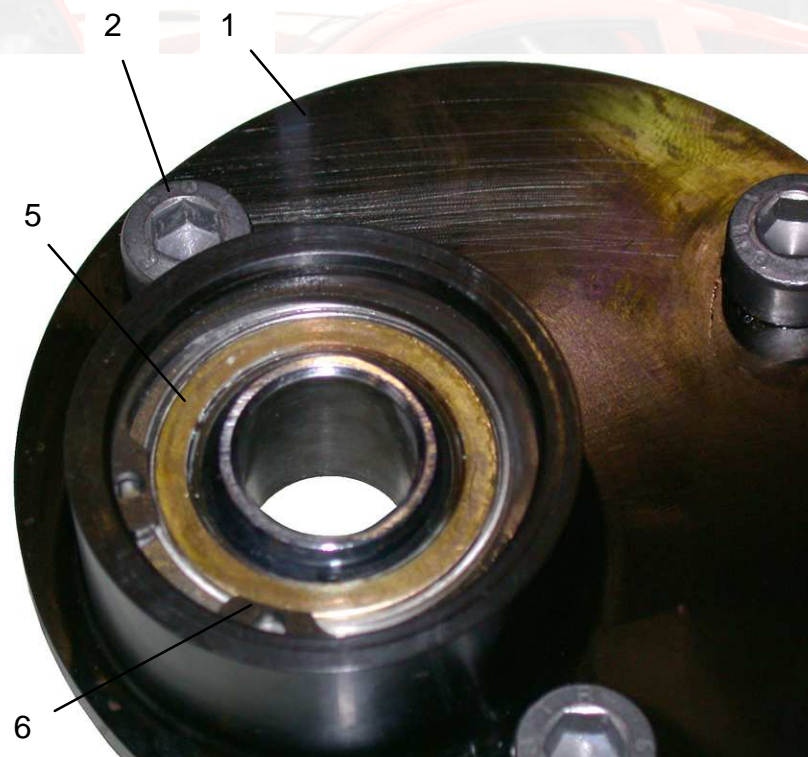
18



### Assembling the upper plate.

Fit the three screws ([ref. 2](#)) on the upper plate ([ref. 1](#)) respecting the direction shown in the photo opposite.

Fit the ball joint ([ref. 5](#)) and the circlips ([ref. 6](#)).



270

1,5 m kg



Fit the ball joint ([ref. 5](#)) and the retaining ring ([ref. 6](#)), as shown in the photo opposite.

**E14**  
**Front**  
**suspension**

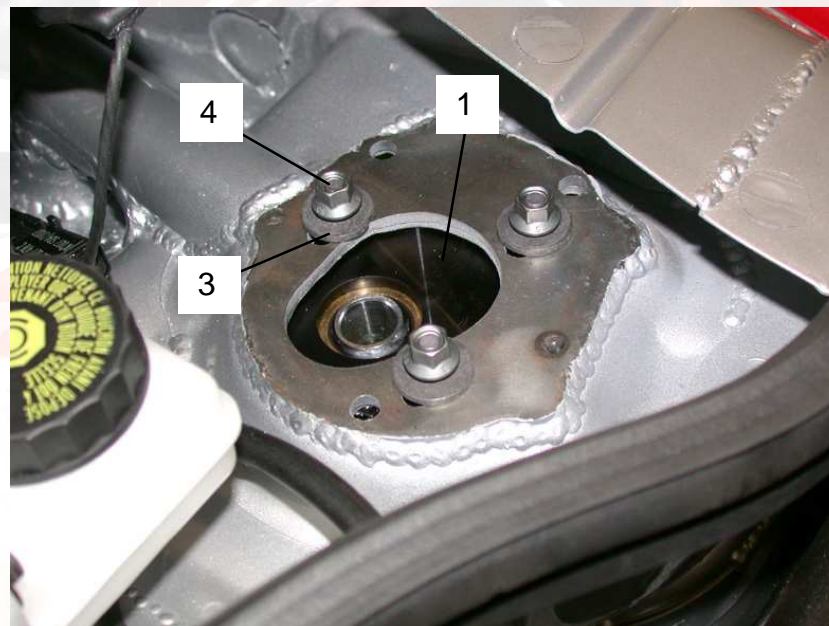


**E**  
**FRONT END**  
**AND REAR END**

## Fitting the upper plates of the shock absorbers on the body.



Fit the upper plates ([ref. 1](#)) on the body with the washers ([ref. 3](#)) and the nuts ([ref. 4](#)), as shown in the photo opposite.



3.5 m.kg



Fitting the front shock absorbers on the upper plates.

Fit the front shock absorber on the upper plate ([ref. 1](#)) with the upper ball joint spacer ([ref. 8](#)) and the nut ([ref. 9](#)).

Torque tighten the nut.



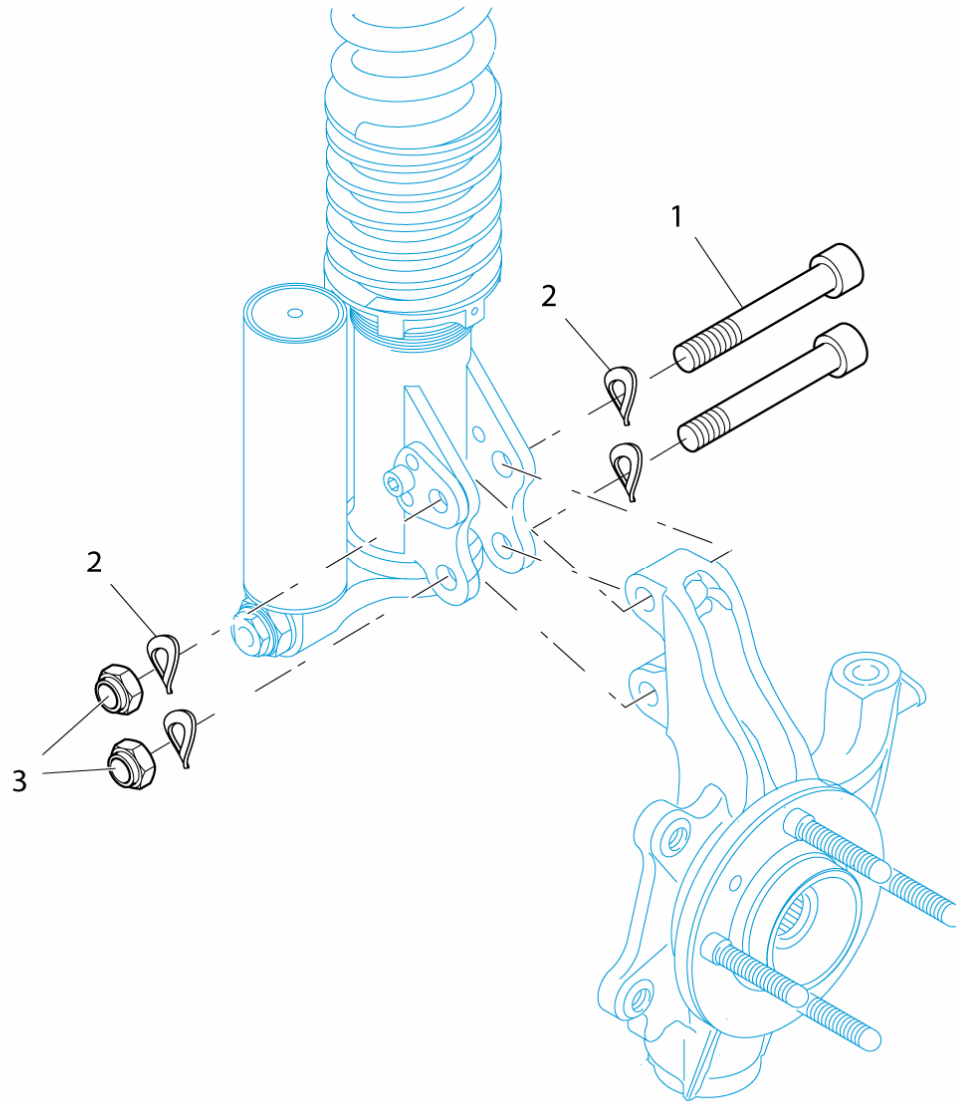
6 m.kg





# C2P2MAX

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[illegible]

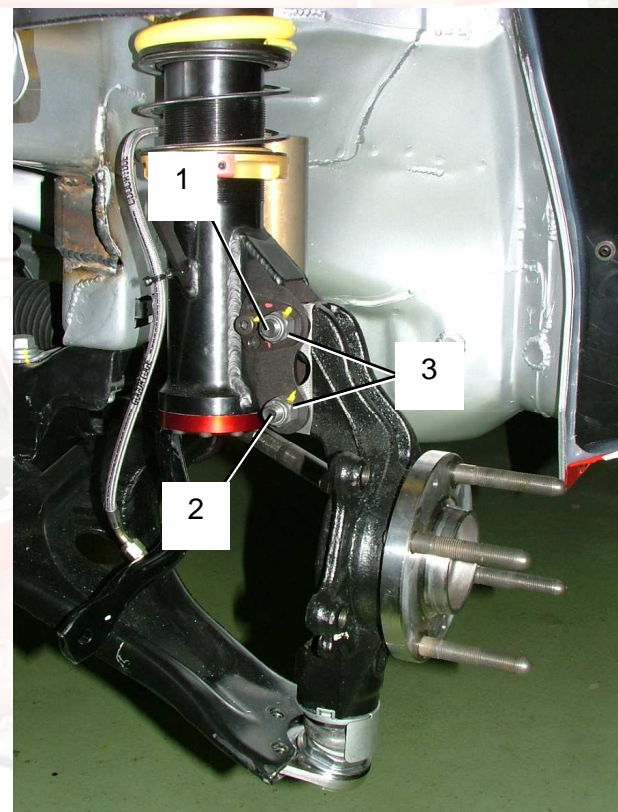


## Fitting shock absorbers on the pivots.

Fit the shock absorbers (struts) on the pivots, with the screws (ref. 1), the washers (ref. 2) and the nuts (ref. 3).



For the tightening of the pivot on the strut, pay attention to press the pivot on the strut (as shown picture below). This way, the camber doesn't move during the running, and it keeps also on assembly marker for disassembly or pivot changing on service.



10 m.kg



**E14**  
**Front**  
**suspension**



**E**  
**FRONT END**  
**AND REAR END**