

- Coat bolts (2) for fastening brake callipers with copper grease. Torque to 45N.m.



- When replacing dowels (1), put a few drops of LOCTITE 270 or 2701 on them. Torque to 45N.m.



- New uprights are available from the Renault Spare Parts Department with the following references:
 - 77 11 154 951 : Front left upright
 - 77 11 154 952: Front right upright
- The upright, a Hélicoïl, an axle, and a stud, which is stuck in the Hélicoïl, are included in the reference. The stud must not be removed.
- In case of frontal accident, it is recommended to change this part.

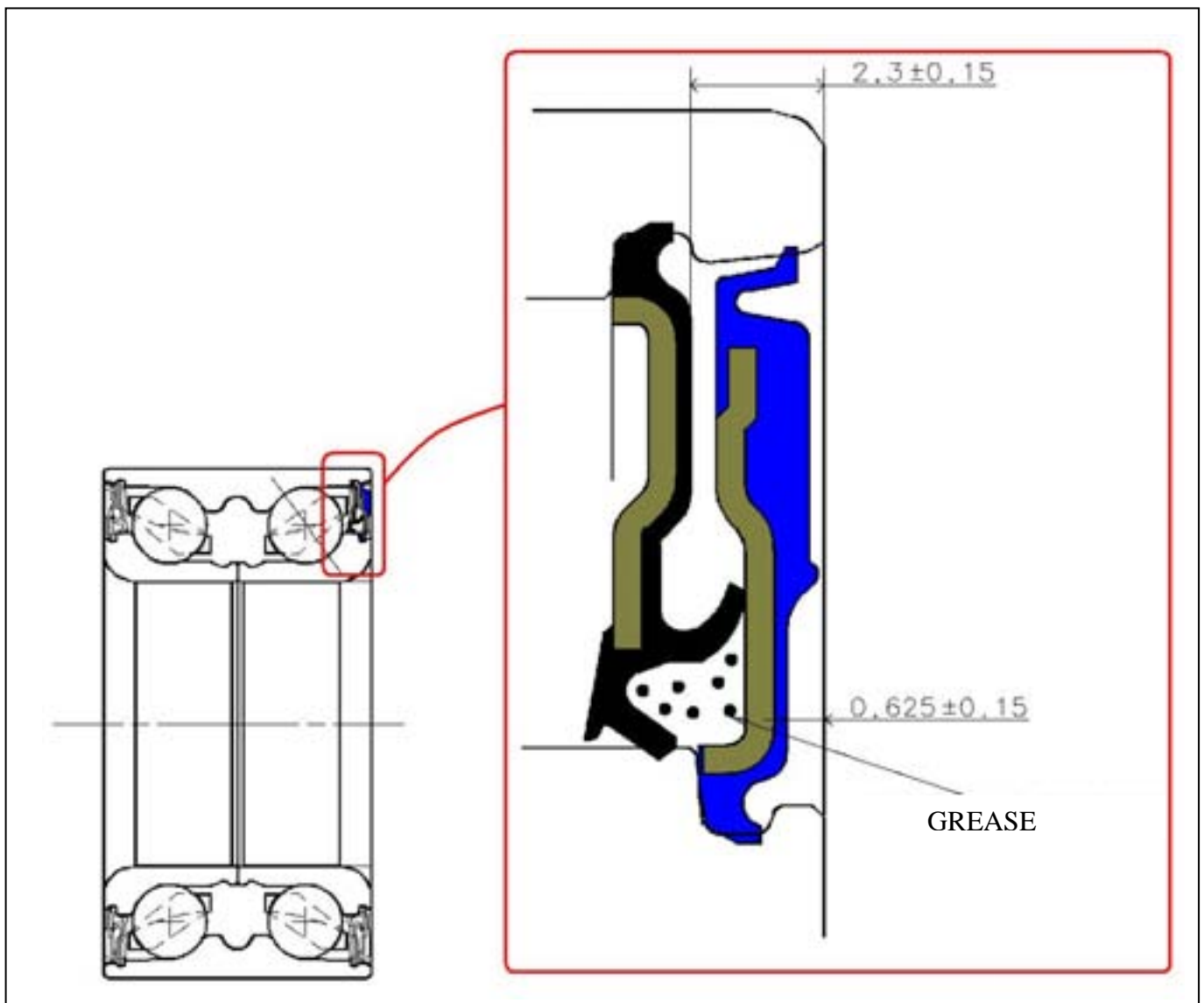


SEALS MAINTENANCE

- A kit of bearing seals is now available, under the reference **77 11 163 147**.
- This kit contains 4 seals for one complete bearing overhaul.



- It is mandatory to respect the following assembly note in case of change.



NOTA: In order to respect these quotations, it is necessary to use new or nearly new seals, thus being able to provide correctly their sealing function.

DESCRIPTION

The front suspension is by means of push rod (2) and single damper (1).

The compression and rebound can be adjusted. It contains:

- rebound regulator (3),
- nitrogen reservoir (5) equipped with a screw (4), which makes it possible to measure the pressure and drain the reservoir.
- compression regulator (6).



ADJUSTMENT

IMPORTANT: Do not touch screw (7).

Compression

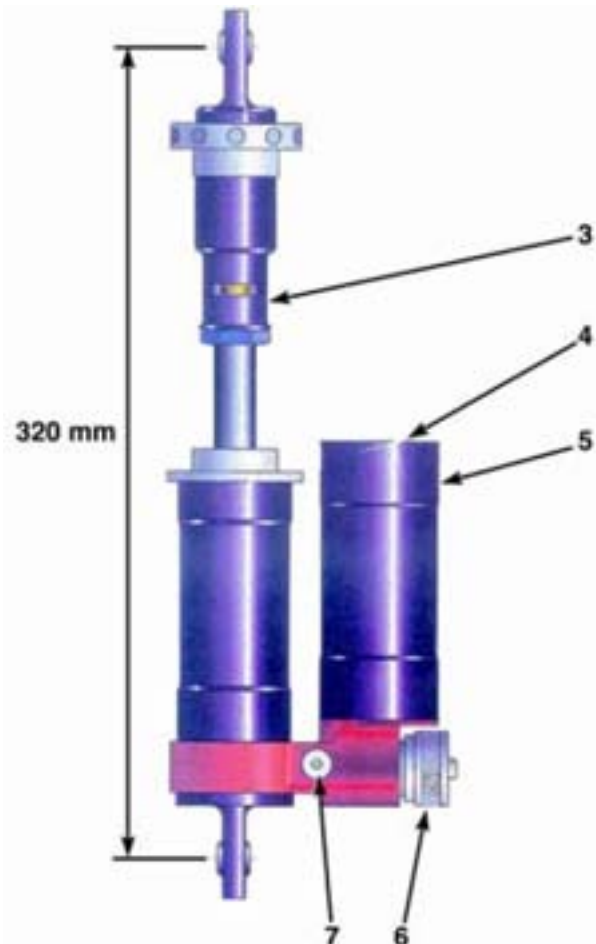
- Turn knurled knob until it abuts in the clockwise direction = hard compression.
- Turn knurled knob until it abuts in the counter clockwise direction (24 clicks) = flexible compression.

NOTA: It is possible that there will be more than 24 clicks when turning the knurled knob in this direction. After 24 clicks, there is no change in the setting.

Rebound

- Turn regulator until it abuts in the clockwise direction = hard rebound.
- Turn regulator until it abuts in the counter clockwise direction (24 clicks) = flexible rebound.

NOTA: If the regulator notches are not accessible, slightly turn end fitting to bring them opposite the window. Make sure that dimension between middle of the two ball joints is 320mm.



FRONT AXLE ASSEMBLY

Spring – Damper set

PRESSURE CHECK

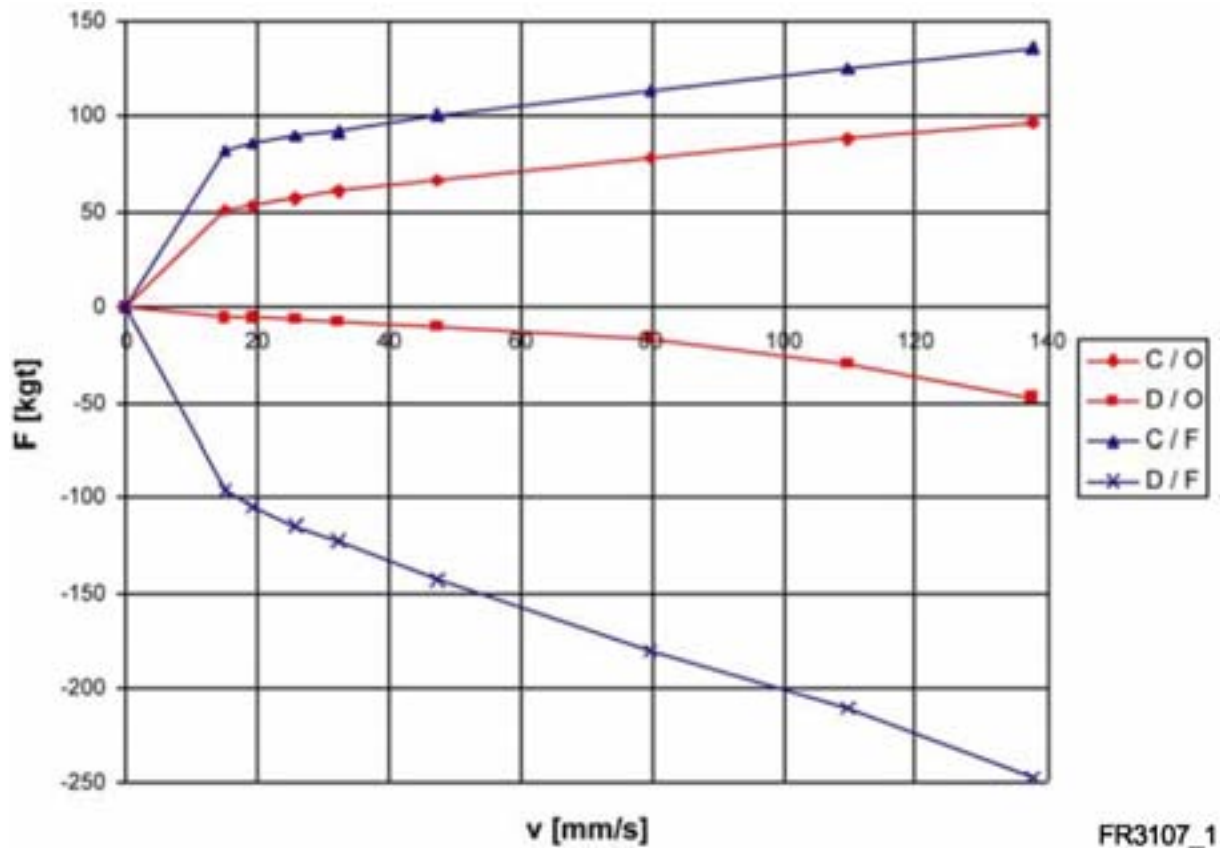
- Remove damper. Lock it in place in a vice.
- Remove screws (5) (see figure on next page). Connect pressure gauge.
- Check that pressure in reservoir is between 8 and 8,5bar. If necessary, adjust pressure.

NOTA: Make sure to take the pressure loss of 0.5 to 1 bar in the measuring instrument into account.

V [MM/S]	F [KGF]			
	C/ O	D/ O	C/ F	D/ F
15.04	50.3	-5.9	82.6	- 95.7
19.35	53.1	-6.4	86.2	- 104.3
25.81	56.7	- 6.8	90.3	- 114.3
32.26	60.3	- 8.2	92.5	- 122.5
47.29	66.2	-10.9	100.7	- 143.3
79.55	78	- 16.8	113.4	- 180.1
109.68	88	- 30.8	125.2	- 210.9
137.67	96.6	- 47.6	136.1	- 246.8

C/O = Open compression, C/F = Closed compression, D/O = Open expansion D/F, = Closed expansion.

FRONT DAMPER



MAINTENANCE

- Wash damper with soap and water. Use of petrol, gasoline and solvents are forbidden.
- Change oil for the first time at 2500km, then after that, every 4000km.

NOTA: It is compulsory to use the oil recommended by the damper manufacturer. Ref.: 152.

DISASSEMBLY/ASSEMBLY

Disassembly of damper

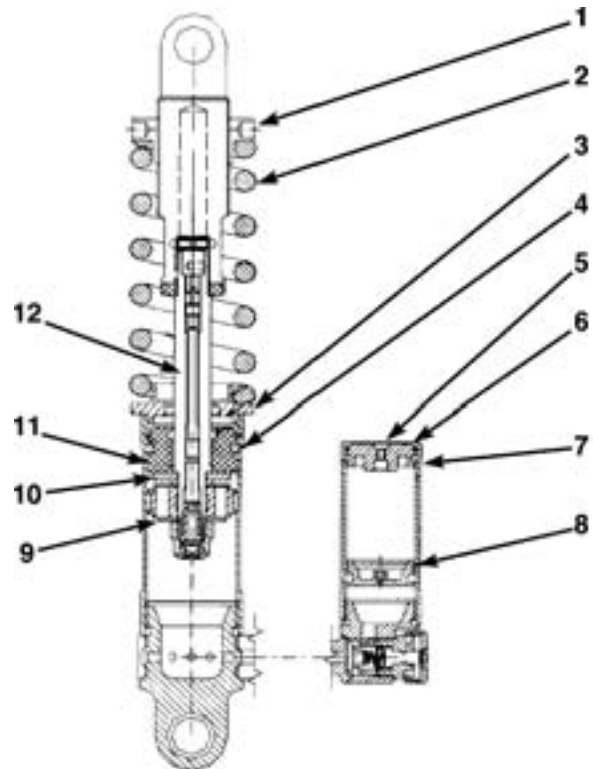
- Remove nut (1).
- Take out spring (2).
- Turn compression knurled knob until it abuts in the counter clockwise direction.
- Turn rebound regulator until it abuts in the counter clockwise direction.
- Remove screw (5).
- Bleed gas off reservoir.

IMPORTANT: Before disassembly, make sure that damper is no longer pressurized. The reservoir is correctly discharged if the bottom of the reservoir can be pushed up with fingers.

- Use rubber mallet to remove seat (3).
- Push guide (11) to gain access to snap ring (4).
- Remove snap ring.
- Separate top of damper casing.
- Drain oil.
- Unscrew rod (12) in top of damper.

Disassembly of gas separator

- Push plug (6) so as to gain access to snap ring (7).
- Remove snap ring.
- Remove plug (6).
- Remove separator (8).



FRONT AXLE ASSEMBLY

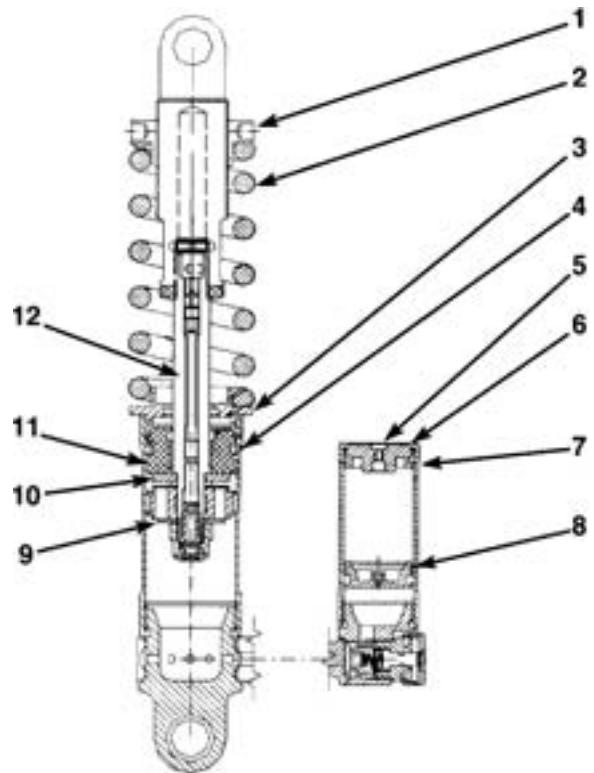
Spring – Damper set

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Assembly

- Follow removal steps in the reverse order.
- Install compression shims (10) and rebound shims (9) as shown in the table below.

SHIM	COMPRESSION	REBOUND
1	Thickness: 0,2mm Diameter: 34mm	Thickness: 0,3mm Diameter: 32mm
2	Thickness: 0,2mm Diameter: 30mm With ring: Thickness: 0,3mm Inside diameter: 30mm Outside diameter: 34mm	Thickness: 0,25mm Diameter: 32mm
3	Thickness: 0,25mm Diameter: 34mm	Thickness: 0,3mm Diameter: 28mm
4	Washer: Diameter: 18mm Sharp angle towards shims	Thickness: 0,3mm Diameter: 26mm
5		Thickness: 0,3mm Diameter: 24mm
6		Thickness: 0,3mm Diameter: 22mm
7		Washer: Diameter: 18mm Sharp angle towards shims

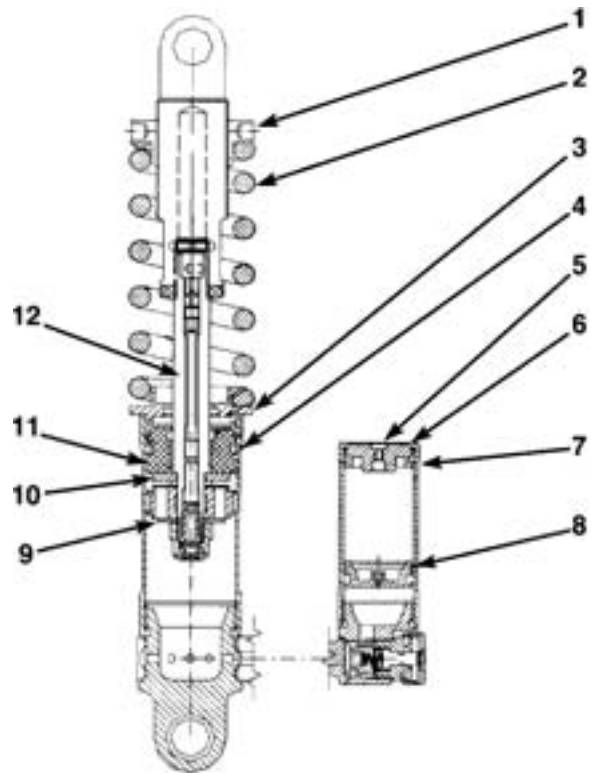


- Clean interior of damper.
- Fill casing of damper with oil, up to the edge. It is compulsory to use the oil recommended by the damper manufacturer.
- Lubricate separator O-ring (8) with silicon grease, then insert separator O-ring in reservoir.
- Completely unscrew rebound regulator.
- Wait until oil no longer emulsifies and install rod (12). Completely close compression regulator.
- Push rod (12) firmly. Wait a moment, and then pull it without letting any air in. Repeat this step two or three times.
- Pull rod and add oil. The level should come up to the throat of the snap ring (4).

FRONT AXLE ASSEMBLY

Spring – Damper set

- Fit guide (11), checking that a thin stream of oil flows before its seal is in the cylinder.
- Open compression regulator.
- Push guide (11) to release snap ring throat.
- Insert snap ring (4).
- Lubricate separate seal (8).
- Install separator.
- Fit snap ring (7).
- Build pressure back up in reservoir, to 8 or 9bar.
- Insert plug (6) and seat (3).



Spring

Table for various springs available.

STIFFNESS IN LB/IN	STIFFNESS EN KG/MM
700	12,40
800	14,17
900	15,49
1000	17,72
1100	19,49
1200	21,26



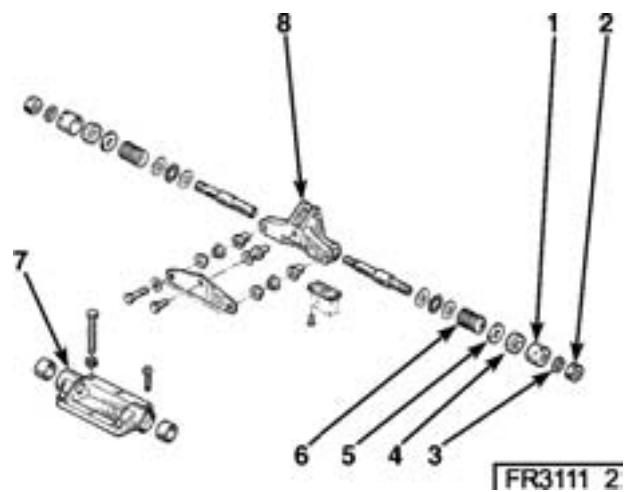
ADJUSTMENT

- Remove lock nut (2), washer (3) and bush (1).
- Set aside spacer (4) and shim (5).
- Check that ON/OFF switch (8) is correctly centred in its mounting (7). If necessary, use shims to correct.
- Insert dished washers (6), following the installation configurations in the table below.



Characteristics of dished washers (6) :

- Diameter : 31,5mm,
- Diameter : 16,3mm,
- Thickness : 2mm,



Example of configuration or setting

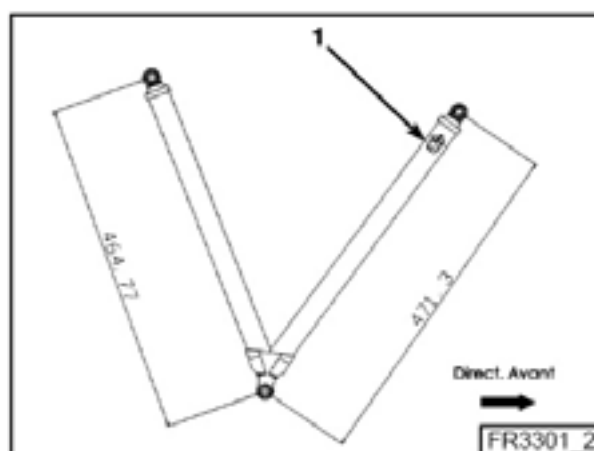
CONFIGURATION	CLEARANCE MAXI (MM)	THICKNESS STACK (MM)	RIGIDITÉ (DAN/MM)	PRÉLOAD MINI	PRÉLOAD MAXI
<<<<>>>>	1,125	13,5	1796	1	5,5
<<<>>><<<	1,6875	20,5	1197	2	5,5
<<>><<	1,6875	14,25	751	3	5,5
<<>><>>	2,25	19	571	3,5	6,5
<<>><>><<	2,81 25	23,75	457	4	8,5
<><	1,6875	8,25	362	4	5,5
<>>	2,25	11	272	5	6,5
<><>	2,8125	13,75	218	6	8,5
<><>>	3,375	16,5	181	6,5	10

OVERVIEW

Each side of the rear axle assembly contains:

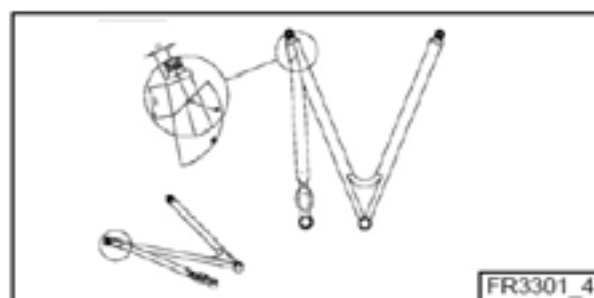
- top Suspension wishbone (4),
- bottom Suspension wishbone (5),
- push-rod (1),
- damper (2),
- ON/OFF switch (3), which houses the head of the damper and the push rod and antiroll bar arms.

The top Suspension wishbone bears the mark FRONT (1) on the longest arm. This mark should be placed towards the front of the car.



To improve the reliability of the Formula Renault 2.0, the rear lower wishbones have been modified by the addition of reinforcement (see drawing).

Since 2005, only the reinforced wishbones are allowed.



The antiroll bar (1) is available in three diameters:

DIAMETER MM	STIFFNESS N.MM/DEGREE
13	51,216
15	90,859
17	149,900



CHASSIS HEIGHT

The height of the rear of the chassis is adjusted by means of the push-rod arm.

One turn of the arm screw (1) varies the height of the chassis by 6.13mm.

An increase of 6.13mm in height varies the angles of the rear axle assembly by the following values:

- camber: - 0.228°,
- caster: - 0.115°,
- alignment: 0.019° (toe),



ALIGNMENT

The Alignment is adjusted using shims (1) inserted on the behind arm of the inferior triangle.

A shim thickness of 0.5mm varies the Alignment by 0.189°.

This adjustment increases the opening and raises the height of the chassis by 0.137mm.

Three thickness of shim are available:

- 0,3mm Ref : FR01_10_10A,
- 0,5mm Ref : FR01_10_10B,
- 1mm Ref : FR01_10_10C,



CAMBER

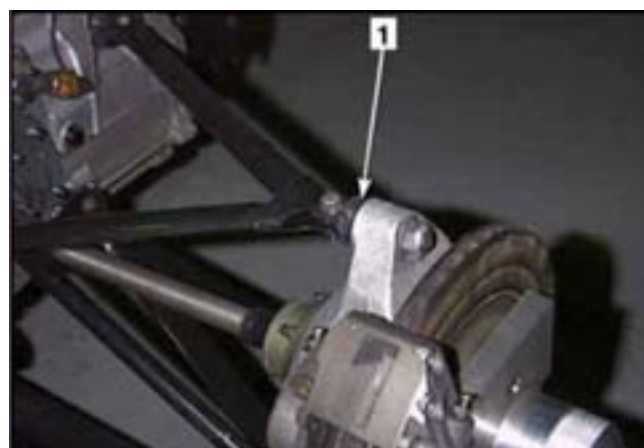
The camber is adjusted by means of shims (1) inserted on the hub carrier.

One 2mm shim thickness varies the camber by 0.5°.

Observe the positioning of shims in order to prevent friction with the rim.

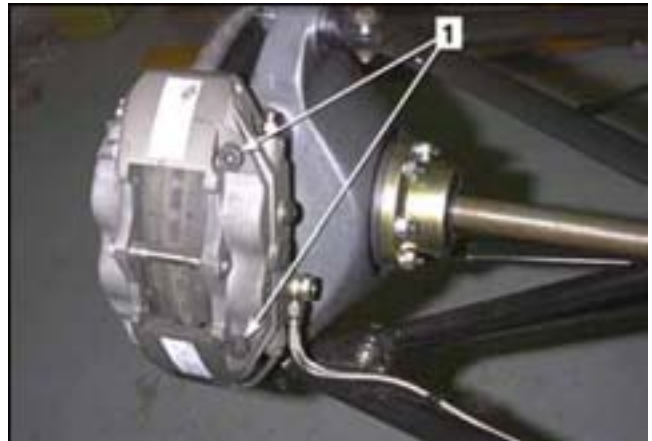
Two thickness of shim are available:

- 1mm Ref. : FR01_11_14A,
- 2mm Ref.: FR01_11_14B,



REMOVAL

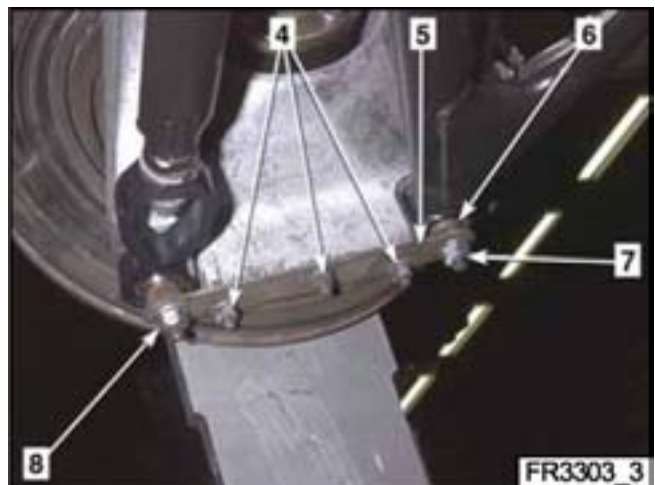
- Remove wheel.
- Remove the two bolts (1) fastening the calliper on the hub carrier.
- Disengage calliper and hook it onto Suspension wishbone.
- Remove disc.



- Remove :
 - nuts fastening drive shaft (2),
 - Bolts fastening top Suspension wishbone (3),



- Remove:
 - the two nuts fastening the bottom Suspension wishbone (7) and (8),
 - The three nuts (4), and set aside plate (5) and bottom tapered spacers (6) on bottom Suspension wishbone ball joints.
- Remove hub carrier.
- Save top tapered spacers on Suspension wishbone.



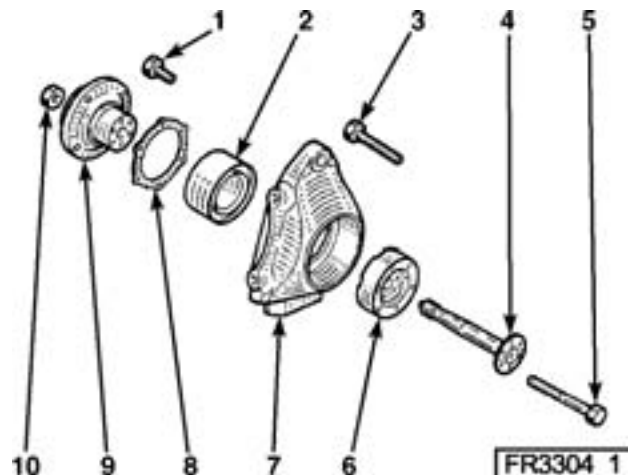
DISASSEMBLY

- Remove nuts (10).
- Save the bolts (5).
- Remove spindle (4) from hub by tapping on end of spindle with a plastic mallet. Make sure not to damage the threading.
- Remove external hub (9) from hub carrier (7) using 4mm dia. pin drift. Do it through the hole in the external hub (9).
- Remove internal hub (6) from hub carrier (7) in the same manner.
- Take out screws (3) on internal hub (6).
- Remove bolts (1) fastening bearing end shield (8).
- Remove end shield.
- Heat hub carrier (7) to 120°C.
- Remove bearing (2).

NOTA: *The bearing should come out without having to use any tools.*

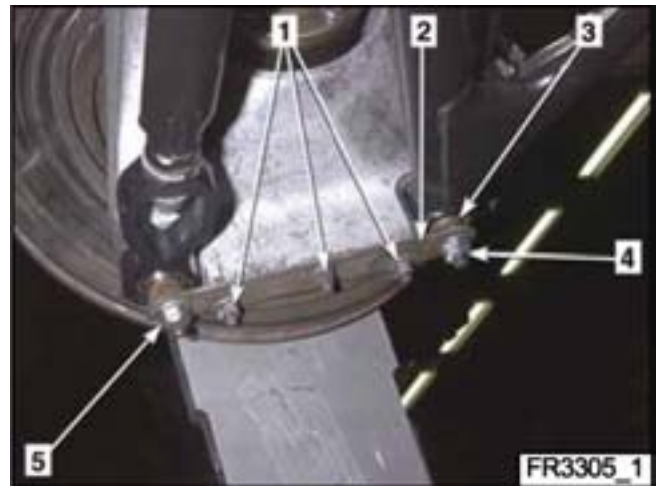
ASSEMBLY

- Heat hub carrier (7) to 120°C and install bearing (2) in hub carrier.
- NOTA:** *The bearing should come out without having to use any tools.*
- Fasten bearing end shield (8) with bolts (1) coated with a few drops of LOCTITE 243. Torque bolts to 6N.m.
 - Use press and drive it home onto internal bearing cage (2) to install external hub (9) in bearing.
 - Run bolts (3) through internal hub (6) holes to fasten drive shaft.
 - Install internal hub (6) on hub carrier (7).
 - Install wheel spindle (4) in hub.
 - Run bolts (5) through holes in wheel spindle. Torque nuts (10) to 25N.m.



INSTALLATION

- Follow removal steps in reverse order. Observe tightening torques.
- When replacing studs (4) and (5) fastening bottom Suspension wishbone, install studs with LOCTITE 270 or 2701. Torque to 25N.m.
- When replacing studs (2) fastening plate, install studs with LOCTITE 270 or 2701. Torque to 11N.m.
- Torque nuts (1) for fastening plate to 10N.m.
- Coat bolts (6) for fastening brake callipers with copper grease. Torque to 45N.m.



- When replacing dowels (7), put a few drops of LOCTITE 270 or 2701 on them. Torque to 45N.m.

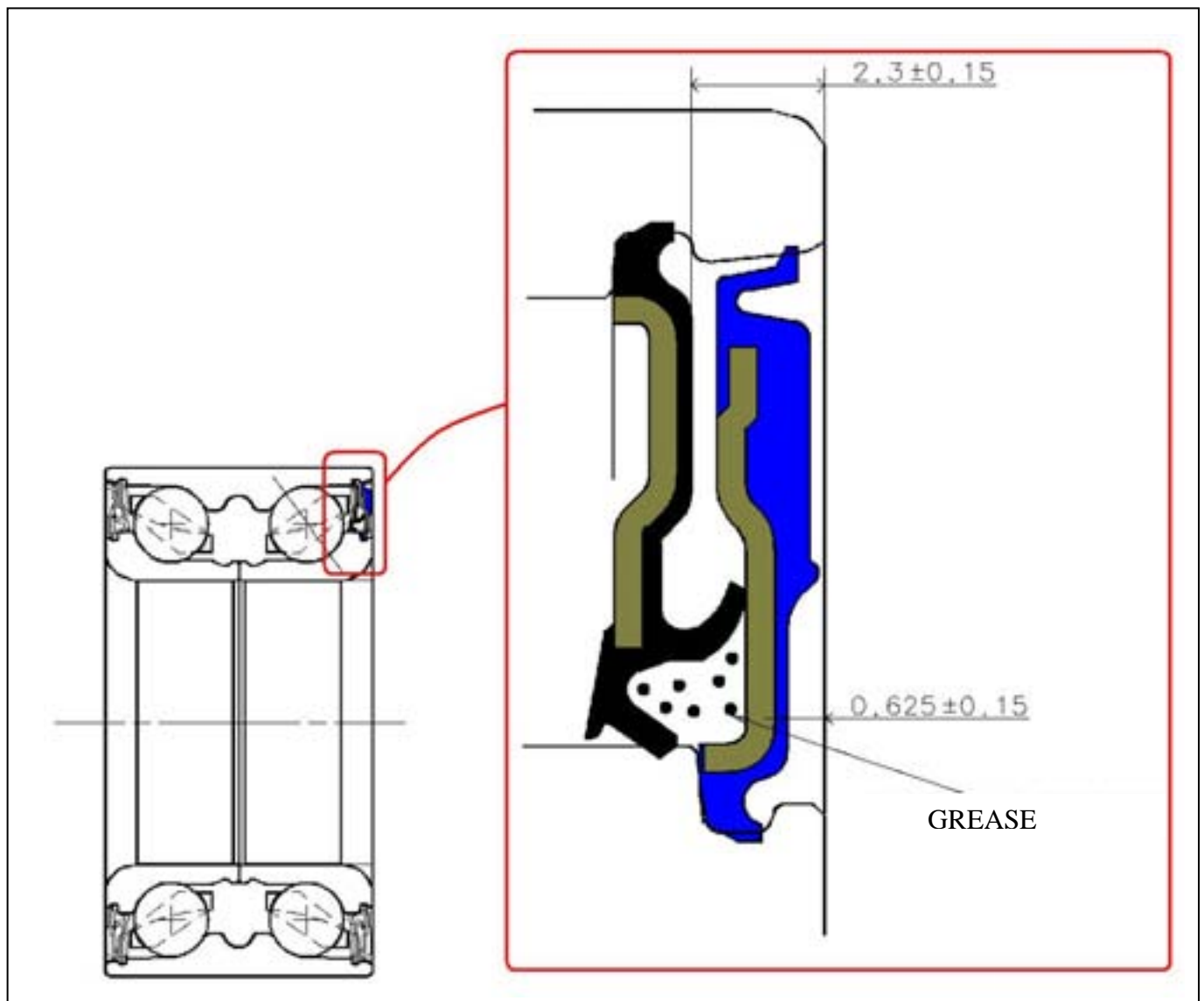


SEALS MAINTENANCE

- A kit of bearing seals is now available, under the reference **77 11 163 147**.
- This kit contains 4 seals for one complete bearing overhaul.



- It is mandatory to respect the following assembly note in case of change.

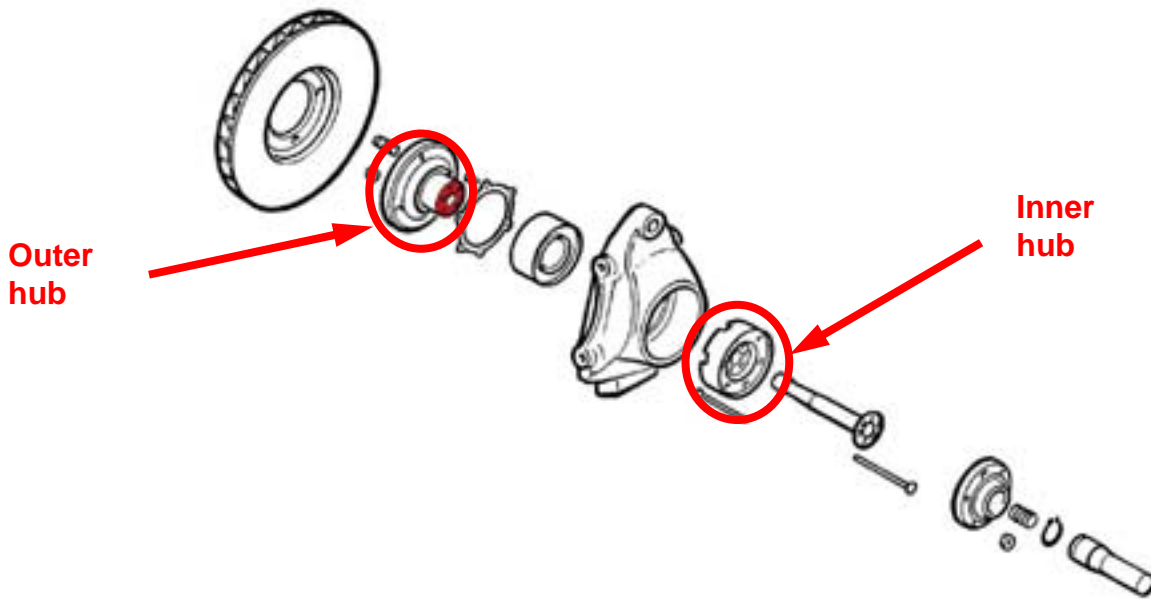


NOTA: In order to respect these quotations, it is necessary to use new or nearly new seals, thus being able to provide correctly their sealing function.

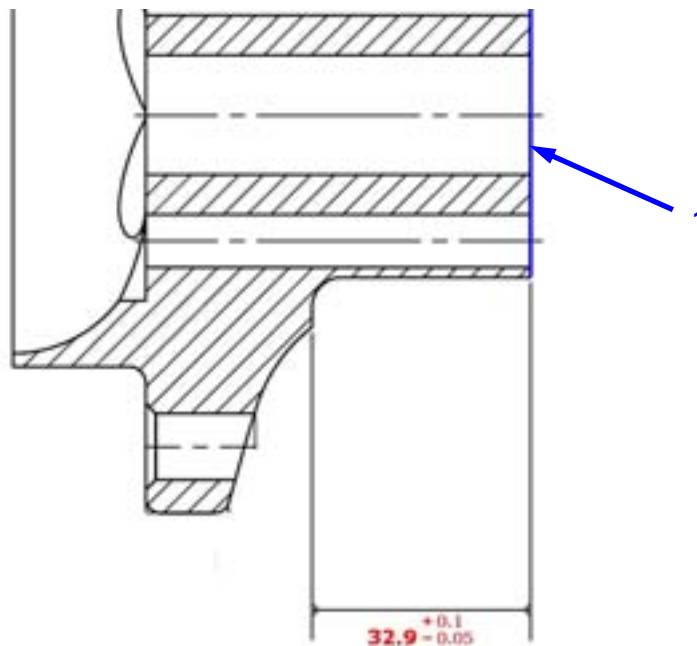
AUTHORIZED MODIFICATION

During the tightening of the rear hub, the retainers (outer and inner rear hubs) can come in contact. As a consequence, the preload of the bearing is not correctly achieved. This might create a mark on the shoulder of the outer hub, causing excessive wheel endplay.

The retainers are the parts circled in red on the picture below:



To solve this problem, it is allowed to re-surface the face (1) of the REAR OUTER HUB provided the respect of the dimension below:



NOTA: This modification is not compulsory.

DESCRIPTION

The rear suspension is by means of push rod (2) and two dampers (1).

The compression and rebound can be adjusted.

It contains:

- rebound regulator (3),
- nitrogen reservoir (5) equipped with a screw (4), which makes it possible to measure the pressure and drain the reservoir.
- compression regulator (6)



ADJUSTMENT

IMPORTANT: Do not touch screw (7).

Compression

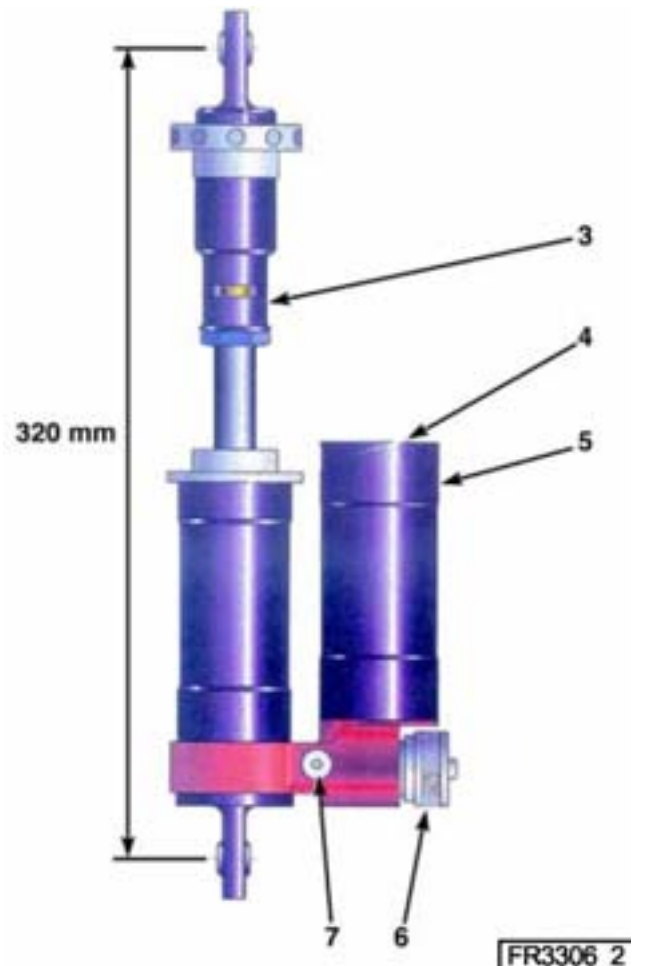
- Turn knurled knob until it abuts in the clockwise direction = hard compression.
- Turn knurled knob until it abuts in the counter clockwise direction (24 clicks) = flexible compression.

NOTA: It is possible that there will be more than 24 clicks when turning the knurled knob in this direction. After 24 clicks, there is no change in the setting.

Rebound

- Turn regulator until it abuts in the clockwise direction = hard rebound.
- Turn regulator until it abuts in the counter clockwise direction (24 clicks) = flexible rebound.

NOTA: If the regulator notches are not accessible, slightly turn end fitting to bring them opposite the window. Make sure that dimension between middle of the two ball joints is 320mm.



REAR AXLE ASSEMBLY

Spring-Damper set

PRESSURE CHECK

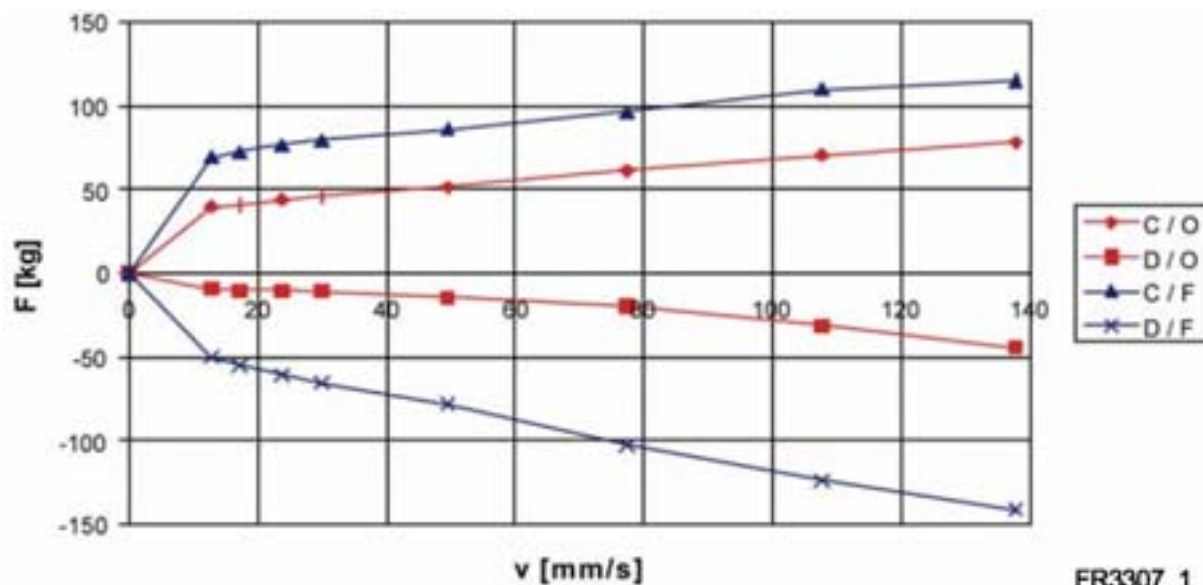
- Remove damper. Lock it in place in a vice.
- Remove screws in reservoir. Connect pressure gauge.
- Check that pressure in reservoir is between 8 and 8.5bar. If necessary, adjust pressure.

NOTA: Make sure to take the pressure loss of 0.5 to 1bar in the measuring instrument into account.

V [MM/S]	F [KGF]			
	C/ O	D/ O	C/ F	D/ F
12.9	39.5	-9.5	68.9	-49.9
17.22	40.8	-10	72.6	-54.9
23.67	44	- 10.4	76.7	- 60.3
30.12	46.3	- 10.9	79.4	- 65.3
49.48	51.7	- 14.1	86.2	-78
77.42	61.2	- 19.5	96.6	- 103
107.54	70.3	-31.3	109.68	- 123.8
137.67	78	-44.5	115.2	-141.1

C/O = Open compression, C/F = Closed compression, D/O = Open expansion, D/F = Closed expansion.

REAR DAMPER



MAINTENANCE

- Wash damper with soap and water. Use of petrol, gasoline and solvents are forbidden.
- Change oil for the first time at 2500km, then after that, every 4000km.

NOTA: It is compulsory to use the oil recommended by the damper manufacturer. Ref.: 152.

DISASSEMBLY/ASSEMBLY

Disassembly of damper

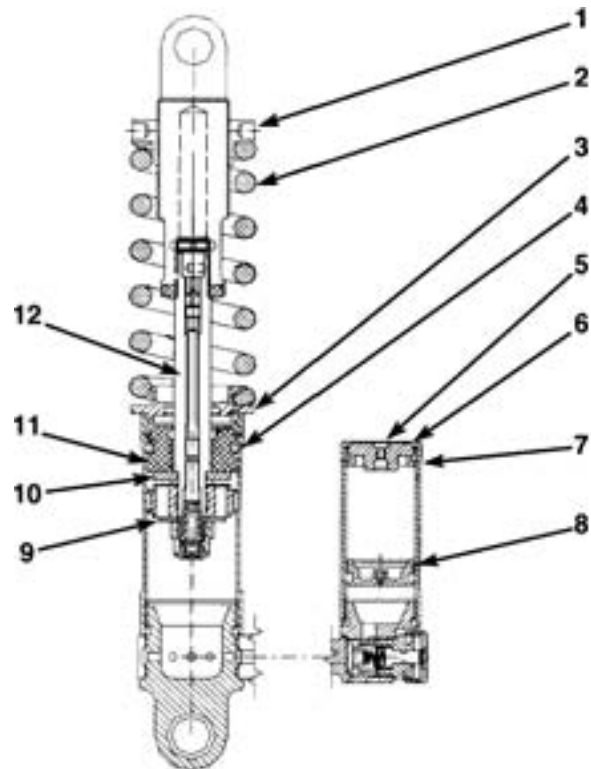
- Remove nut (1). Take out spring (2).
- Turn compression knurled knob until it abuts in the counter clockwise direction.
- Turn rebound regulator until it abuts in the counter clockwise direction.
- Remove screw (5). Bleed gas off reservoir.

IMPORTANT: Before disassembly, make sure that damper is no longer pressurized. The reservoir is correctly discharged if the bottom of the reservoir can be pushed up with fingers.

- Use rubber mallet to remove seat (3).
- Push guide (11) to gain access to snap ring (4).
- Remove snap ring.
- Separate top of damper casing.
- Drain oil. Unscrew rod (12) in top of damper.

Disassembly of gas separator

- Push plug (6) to gain access to snap ring (7).
- Remove snap ring.
- Remove plug (6).
- Remove separator (8).

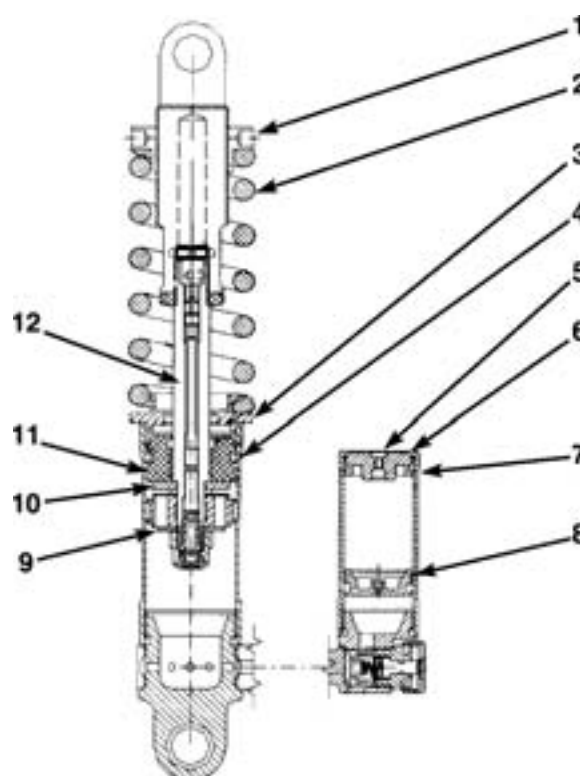


Assembly

- Follow removal steps in the reverse order.
- Install compression shims (9) and rebound shims (10) as shown in the table below.

SHIM	COMPRESSION	REBOUND
1	Thickness: 0,2mm Diameter: 34mm	Thickness: 0,2mm Diameter: 32mm
2	Thickness: 0,2mm Diameter: 30mm With ring: Thickness: 0,3mm Inside diameter: 30mm Outside diameter: 34mm	Thickness: 0,3mm Diameter: 26mm
3	Thickness: 0,2mm Diameter: 34mm	Thickness: 0,3mm Diameter: 24mm
4	Washer: Diameter: 18mm Sharp angle towards shims	Thickness: 0,25mm Diameter: 32mm
5		Thickness: 0,3mm Diameter: 20mm
6		Washer: Diameter: 18mm Sharp angle towards shims

- Clean interior of damper.
- Fill casing of damper with oil, up to the edge. It is compulsory to use the oil recommended by the damper manufacturer.
- Lubricate separator O-ring (8) with silicon grease, then insert separator O-ring in reservoir.
- Completely unscrew rebound regulator.
- Wait until oil no longer emulsifies and install rod (12). Completely close compression regulator.
- Push rod (12) firmly. Wait a moment, and then pull it without letting any air in. Repeat this step two or three times.
- Pull rod and add oil. The level should come up to the throat of the snap ring (4).
- Fit guide (11), checking that a thin stream of oil flows
- Before its seal is in the cylinder.
- Open compression regulator.
- Push guide (11) to release snap ring throat.
- Snap ring (4) insert
- Lubricate separate seal (8). Install separator.
- Fit snap ring (7).
- Build pressure back up in reservoir, to 8 or 9bar.
- Insert plug (6) and seat (3).



SPRING

Table for various springs available.

STIFFNESS EN LB/IN	STIFFNESS EN KG/MM
700	12,40
800	14,17
900	15,49
1000	17,72
1100	19,49
1200	21,26



WHEELS

Material: aluminium.

Weight :

- Front wheel : 5,3kg
- Rear wheel : 5,6kg

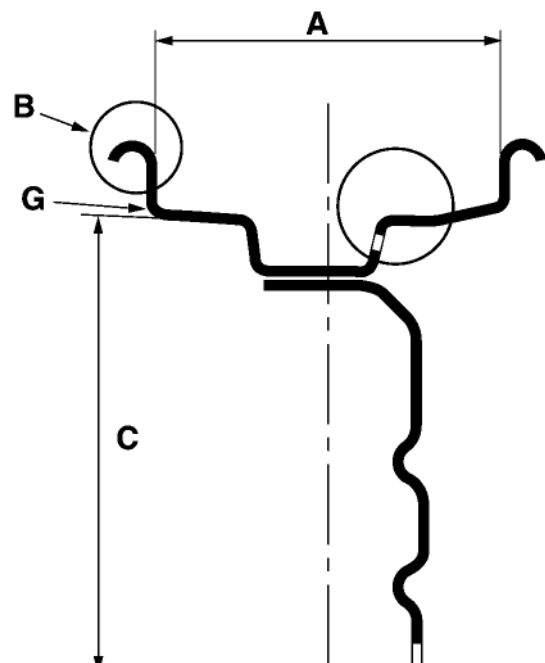
		A	B	C
	TYPE OF WHEEL	WIDTH (INCHES)	RIM EDGE PROFILE	Ø NOMINAL (IN INCHES) UNDER TYRE BEAD
FRONT WHEEL	8Jx13	8	J	13
REAR WHEEL	10Jx13	10	J	13

Maximum run-out: 1.2mm measure on rim edge (G).

Maximum out of round: 0.8mm measured on tyre bead mating face.

Precautions to avoid the slow losses of pressure:

- The valves of wheels must be changed at least once during the season,
- The valve caps must be in place.



FR3501_1

ATTACHMENT

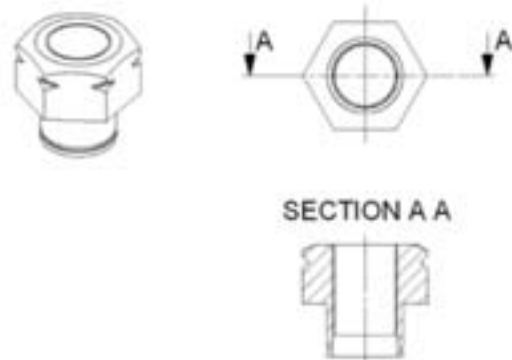
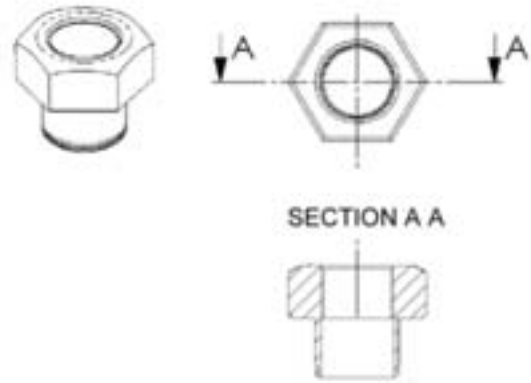
Type : central

Nuts: To improve the reliability and the safety of use of the Formula Renault 2.0, a new type of wheel nut has been specified.

Tightening torque: 130N.m

Former type P/N. 01 00 07 033

New type: P/N. 77 11 154 881



Left hand threads wheel nut assembly.

The kit is available at Renault Sport Spare Parts department at the reference 77 11 154 948.

The kit include: the wheel pin and the wheel nut assembly (left thread nut + aluminium belt marked left).

TIRES

Michelin tubeless tyres.

		SLICK	RAIN
TYPE	Front	FR 2.0 or S210, according to regulation	P220
	Rear	FR 2.0 or S210, according to regulation	P220
SIZE	Front	16x53x13	16x53x13
	Rear	23x57x13	23x57x13
HOT INFLATING PRESSURE	Front	1,45bar	1,45bar
	Rear	1,6bar	1,6bar
WEIGHT	Front	6,14kg	6,12kg
	Rear	8,14kg	8,24kg

TIGHTENING TORQUES (ENN.M)

Axial ball joint: 5
Ball joint nut: 3,5
Alignment adjustment sleeve screw: 2
Rack mounting screw: 9,5

STEERING RATIO

64.5 mm of travel per 1 pinion revolution

REPLACEMENT

Removal

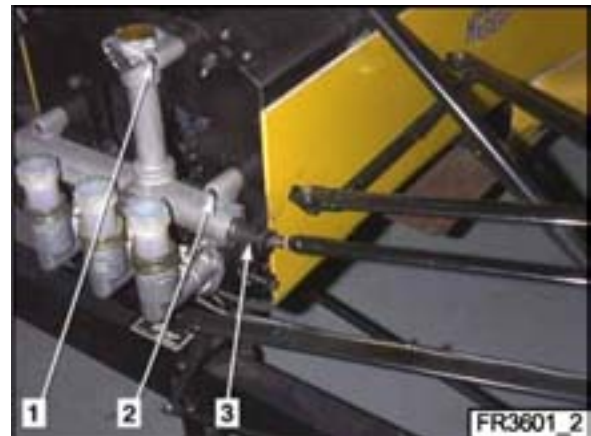
- Unscrew screw (1) on steering column.



- Disconnect left and right ball joints (3).
- Remove the two top screws (1) and the four bottom screws (2), then take out rack.

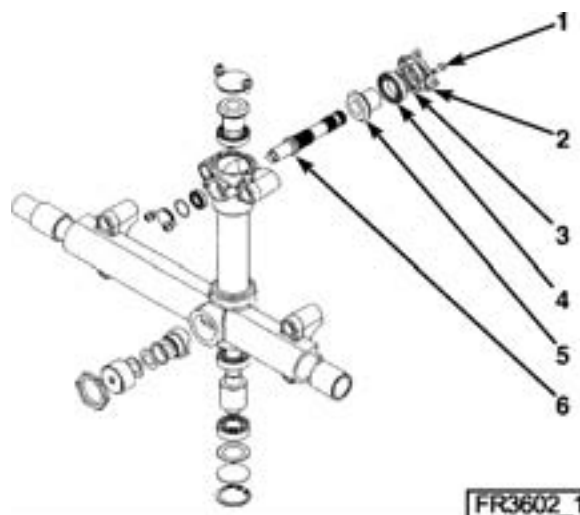
Installation

- Repeat removal steps in reverse order.
- Observe tightening torques.



REPLACEMENT OF INPUT SHAFT

- Remove the four screws (1), and then take out flange (2) and shims (3).
- Take out input shaft assembly (6).
- Take out bearing shaft (5) and remove roller bearing (4).
- Install bearing housing (5) on shaft (6). Make sure that bearing housing is abutted onto shoulder of shaft.
- Install roller bearing (4) on bearing housing (5).
- Install input shaft assembly on rack.
- Insert shims (3) in flange (2) and fasten flange to rack with screws (1).
- Check that there is no play. Make sure that there is a slight prestress on the mounting and that the clearance of the rack is from stop to stop, without jerks.
- If necessary, adjust with shims (3).



INSPECTION OF STEERING COLUMN MOUNTING

- Check mounting (1) regularly as well as after each impact with product type «Ardrox».
- Replace mounting if it is cracked.



STEERING WHEEL PLAY CONTROL

If the play in the steering wheel is important, one can rotate the pinion by 180°, so that the pinion uses new teeth.

MASTER CYLINDER

TIGHTENING TORQUES (in N.m)

Banjo fittings: 13

Master cylinder mounting nuts: 23

Characteristics

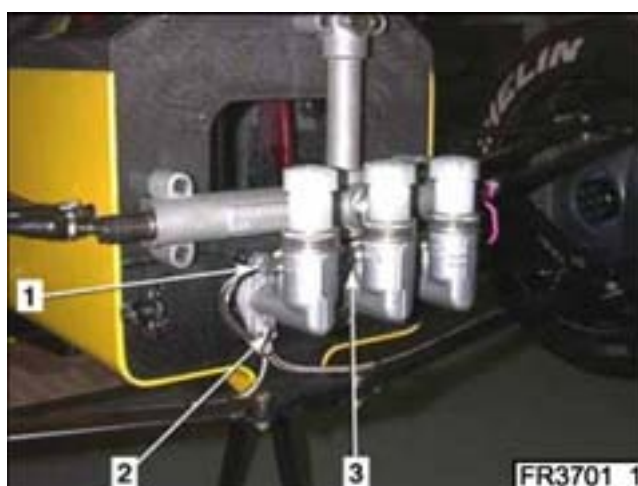
- Diameter of master cylinders :
 - front brake : 5/8",
 - rear brake: 3/4".
- Brake Fluid: DOT5.
- Repair kit part number:
 - front brake master cylinder: 77 11 150 526,
 - rear brake master cylinder: 77 11 150 527.

Removal

- Remove screws fastening banjo fitting (1) for front brake master cylinder or (3) for rear brake master cylinder (provide for outflow of brake fluid).
- Remove the two nuts (2) and take out master cylinder.

Installation

- Repeat disassembly steps in reverse order.
- Observe braking torques.
- Bleed brake lines.



BRAKE PROPORTIONING DEVICE

Functioning

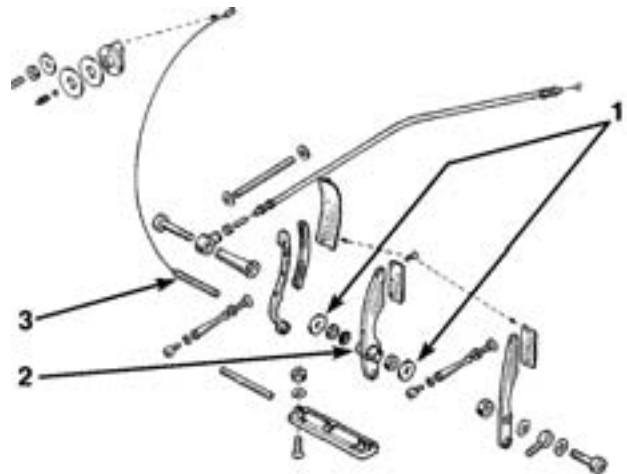
The driver can adjust the brake-proportioning device from his or her seat.

- Turn control (1) in clockwise direction to increase braking on rear and decrease it on front.
- Turn control (1) in counter clockwise direction to decrease braking on rear and increase it on front.



Replacement

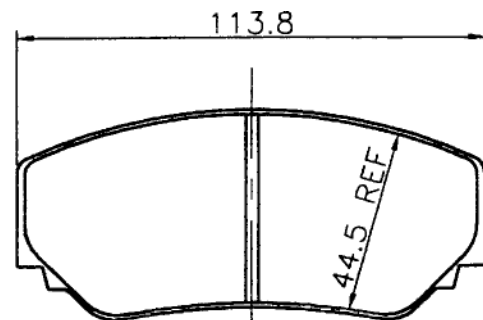
- Bring ball joint (2) to middle of threading (3).
- Check that assembly is free moving. The washers (1) should not be tight.



BRAKE PADS

The quality of the linings is open, on condition of maintaining the original friction surfaces (see figure opposite).

- Thickness of pads: 16mm.
- Brake fluid: DOT5.
- Example of types of pads:
 - FERODO 4003F (type mounted on mass-produced models),
 - FERODO RACING FRP 219 R,
 - PAGID blue type U2127RS4/2.



CALLIPERS

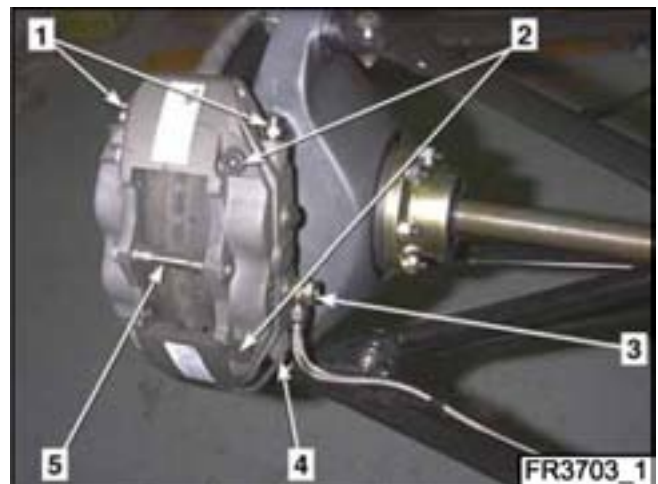
TIGHTENING TORQUES (in N.m)

- Calliper mounting screw (2): 45
- Wheel bolts: 130
- Banjo fitting (3): 15
- Connecting tube connector (4) : 14
- Bleed screw (1):
 - hot: 14
 - cold: 18
- Carrier screw (5): 12

NOTA: The callipers should be rebuilt: at least once, at the end of the season, every time the calliper has undergone extremely high temperature stress.

Characteristics

- Bottom piston diameter: 34,9mm .
- Top piston diameter: $31,8mm_{-0}^{+0,2}$
- Springs setting: $2kg_{-0,25}^{+0}$



General instructions

- Drive back pistons with suitable clamps so as not to change geometry or leave chips likely to nick seals.
- Do not tighten bleed screw (1) to too high of a torque so as not to damage the tapered bearing surface (risk of leaks).
- Systematically replace damaged hydraulic lines.
- Observe torque of carrier screw (5): risk of deforming calliper.

Maintenance

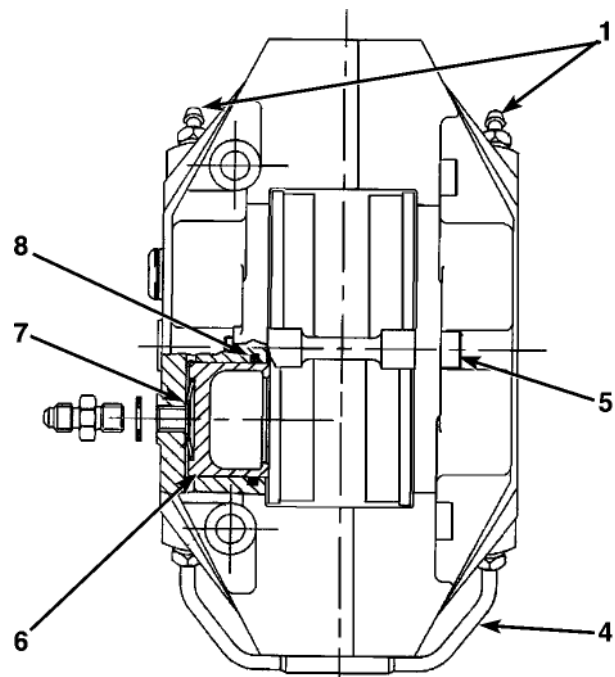
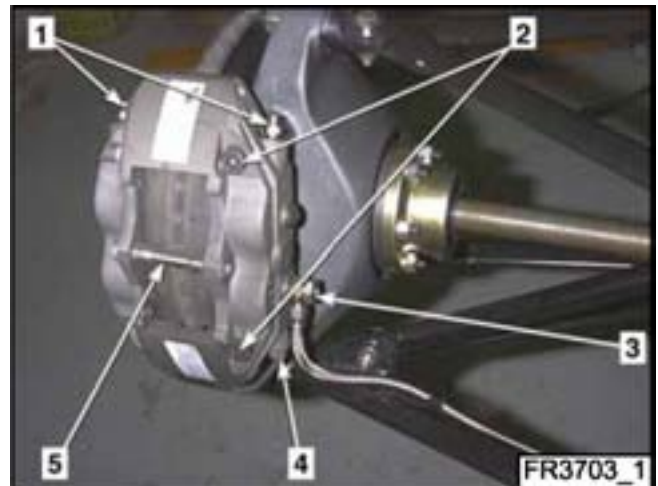
IMPORTANT: Take the necessary precautions so that no chemical products contaminate the brake system components. Never try to separate the two parts of a calliper.

- Clean callipers with a brake-cleaning product. Remove carrier (5) and brake pads.
- Remove screws (2) fastening calliper to hub carrier. Remove calliper, making sure not to twist or deform hydraulic lines.
- Place a recipient capable of holding the brake fluid contained in calliper under the calliper. Gently actuate brake pedal to extract pistons, and then remove them by hand.
- Disconnect banjo fitting (3).
- Use a soft tool to take out seals (8), making sure not to scratch throats and bores. Throw away seals.
- Clean interior of calliper with brake fluid. Dry it. Check that there are no signs of wear or corrosion on the pistons (6) and in bores.
- Systematically replace all parts that are deeply scratched or marked.
- Lubricate seals (8) and pistons (6). Use ONLY the grease supplied in the repair kits.

NOTA: It is normal that the inside diameter of the seals (8) is greater than the inside diameter of the pistons (6).

- Unscrew bleed screws (1). Reinsert seals (8), pistons (6) and springs (7) carefully so as not to pinch seals.

NOTA: Only install new seals.



BRAKES

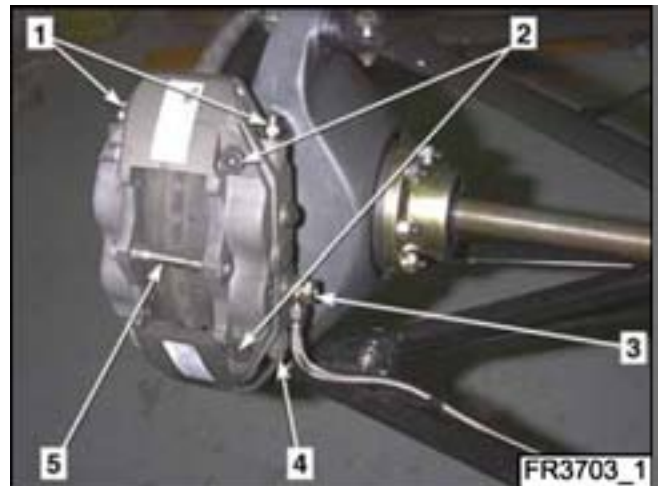
System components

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- Tighten bleed screws (1).
- Install calliper, pads and carrier.
- Observe recommended tightening torques.
- Fit banjo fitting (3) with a new copper gasket. Connect fitting.
- Bleed lines completely. Adjust level in master cylinder reservoir, using suitable brake fluid.

IMPORTANT: Check that there are no leaks before using the vehicle.

NOTA: To make interventions easier, a fast coupler can be installed on the rear brakes circuit.

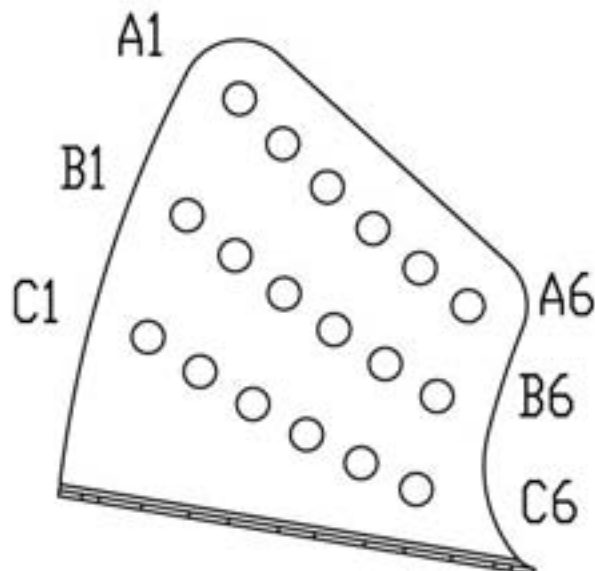
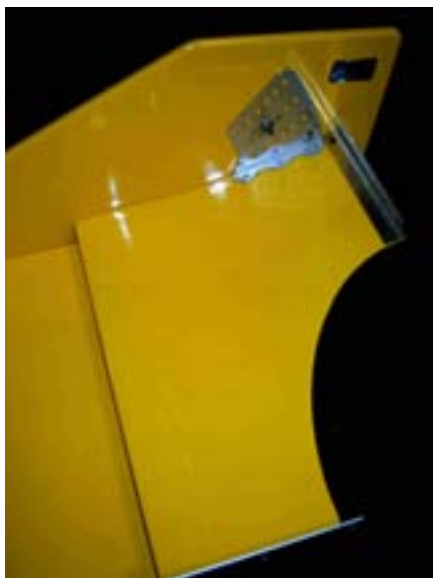


RECOMMANDATION

For safety reasons, check the silicone protection inside the throttle cable conduit does not go ahead of the conduit stop, near the pedal. If it does, cut the silicone protection just ahead of the conduit stop.

FRONT WING

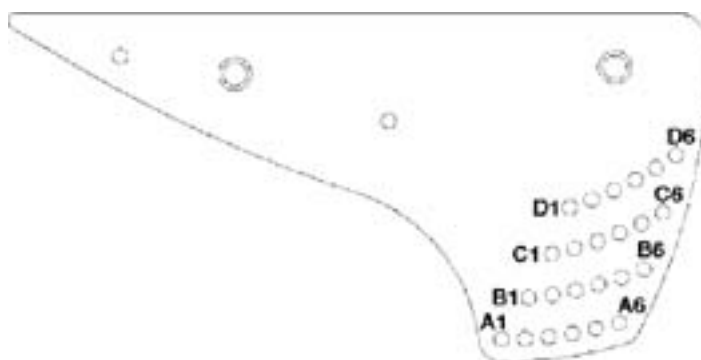
Front wing angle of incidence is modified by changing the position of its fasteners. Changing from one fastening hole to the juxtaposed hole varies the angle of incidence according to the following table.



AVANT	1	2	3	4	5	6
A	8.8	9.2	9.7	10.1	10.6	11.0
B	11.5	11.9	12.4	12.8	13.3	13.7
C	14.2	14.7	15.1	15.6	16.0	16.5

REAR WING

Rear wing angle of incidence is modified by changing the position of its fasteners. Changing from one fastening hole to the juxtaposed hole varies the angle of incidence according to the following table.



ARRIERE	1	2	3	4	5	6
A	0	1	2	3	4	5
B	6	7	8	9	10	11
C	12	13	14	15	16	17
D	18	19	20	21	22	23