

Technical regulations

NOMENCLATURE 2011

4th April 2011 Release











The technical regulations is based on the following:

Parts for the FORMULA RENAULT 2.0 single-seaters are represented in this nomenclature and split into three categories:

CATEGORY« A »	No modifications are authorised. The parts in this category must remain in their original positions and fulfil the function/s for which they were originally intended. These parts must be genuine FORMULA RENAULT 2.0 parts.
CATEGORY « B »	Parts of the category "A" being the subject of specific prescriptions. Only the modifications or prescriptions indicated in the regulations or in the FORMULA RENAULT 2.0 nomenclature are authorised.
CATEGORY « C »	The parts classed in this category are considered to be unrestricted, on the express condition that the function for which it was originally designed is not deviated from, that it does not fulfil any additional function and that it is located in the same place as the original part. Adapted parts are permitted but must be submitted for approval to the RENAULT SPORT Scrutineers.

The set of items or subassemblies that make up a part or assembly are deemed to belong to the same category as the part or assembly in question.

Scrutineering may consist of comparing the part to be checked against a similar new genuine FORMULA RENAULT 2.0 part.

All parts not shown in the technical regulations are systematically classed in category "A" unless specified otherwise above.

The pictures published in this document only aim at making the nomenclature easier to understand. These pictures cannot be used for any comparison with original vehicle parts.

Some parts from the A and B category present a special mark (hologram, engraving). The presence of this mark guarantees the origin of the part and their use is mandatory. The absence of a mark is a technical non conformity.

An additional marking (engraving or painting) is allowed on all the parts from A and B category.









Nuts, screws, bolts, and uniballs

Nuts, screws, bolts and uniballs are in the category C unless mentioned in the nomenclature. However, the following must be respected:

- the original diameters,
- the original screw thread,
- the material should be steel of equal or superior quality as that of the original part. The use of other materials (e.g., titanium) is forbidden.

Any type of screw (stud, bolt or standard screws) is allowed, unless mentioned in the nomenclature.

To assure the tightness of the screws, the use of locking wire is permitted,

All the screws that have the function of setting-up an element are in category "A" unless other mention in the nomenclature.

Washers

All washers are in « C » category unless mentioned in the nomenclature and can be removed if required.

It is allowed to add washer only to improve mechanical assemblies.

The use of washer for setting purpose is forbidden, unless specifically mentioned in the nomenclature.

Electrical Ioom

All the electrical looms belong to category "B" and must be genuine. The loom may be protected by non-retractable sheathes.

Protections

It is allowed to add protection of any kind over the mechanical elements of the car unless specifically mentioned in the nomenclature. These protections must have the sole function of protecting the elements.

For the driver wellness, it is allowed to add protections in the cockpit, these protections must be removed fast without tool.

Bodywork

Only in order to manage correct assembly and adjustment of the bodywork part, it is allowed to slightly modify the bodywork parts and their respective supports.

These modifications are submitted to the approved by RENAULT SPORT technical scrutineers. Adhesive tape may be put on the bodywork but only on fastening elements or other vulnerable leading or trailing edges. In all circumstances, the only purpose of adhesive tape must be to protect the element onto which it has been applied. It must not in any circumstance join various bodywork elements unless special cases mentioned in the nomenclature.









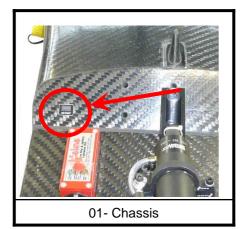
BODYWORK, WINGS, ROLL HOOP, ENGINE EQUIPMENT

Component parts of the bodywork, wings, roll hoop and some engine equipment parts are identified by one or more hologram stickers.

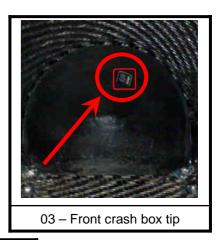
Their presence is mandatory. The person competing is responsible for the condition of the stickers. They must be visible.

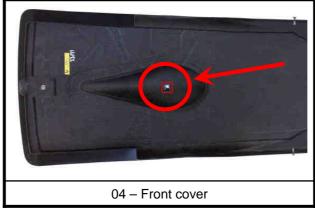
All the bodywork parts and the tub can be painted or decorated with adhesive film.

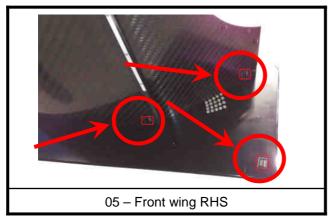
Description of the parts with the location and number of hologram stickers are indicated by arrows.

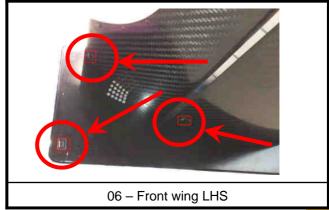














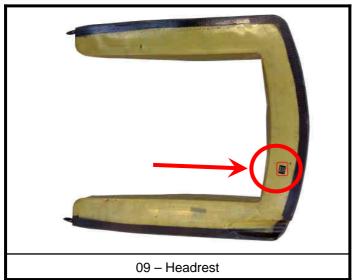


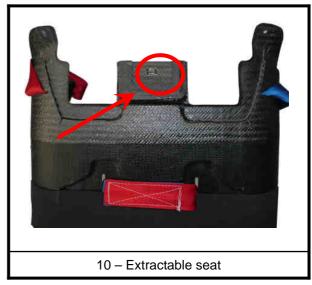


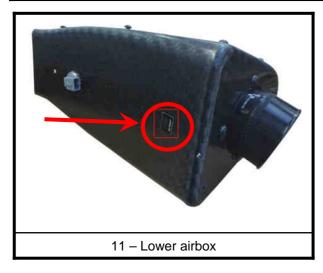


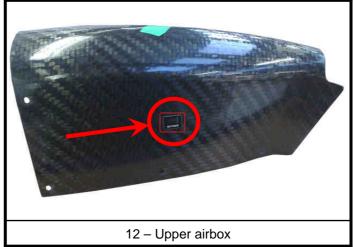










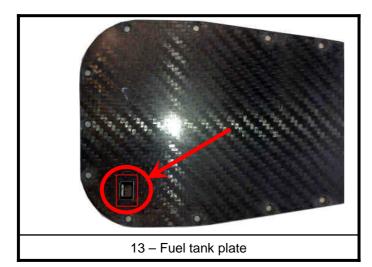


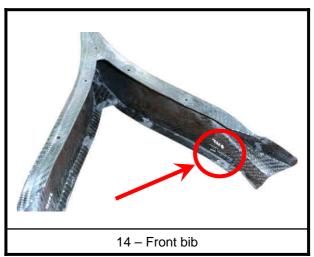


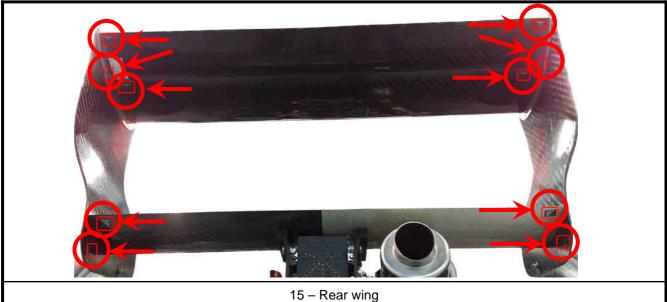


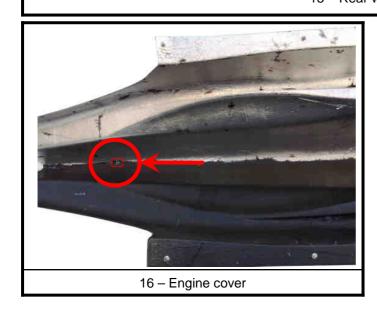


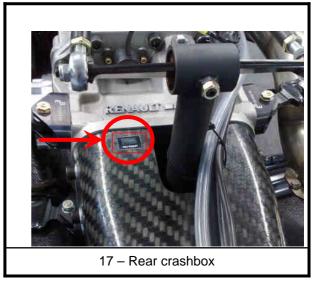










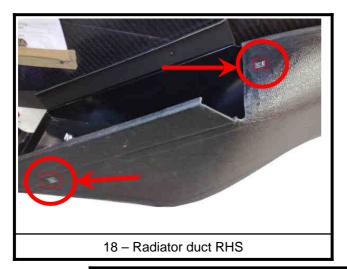


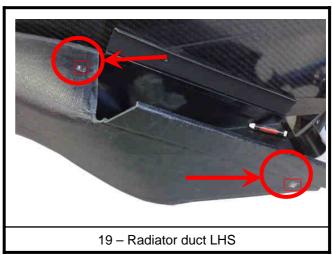


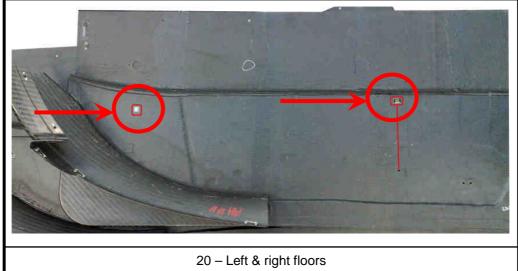


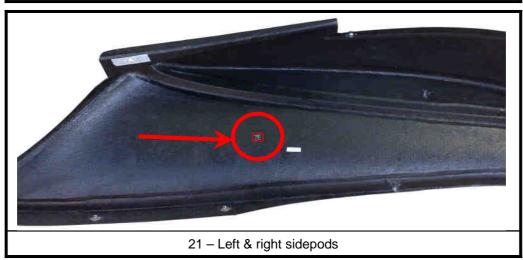












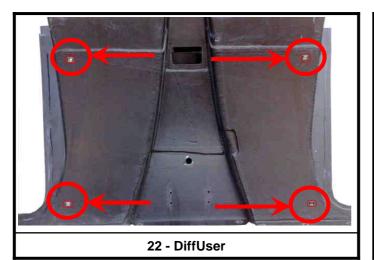




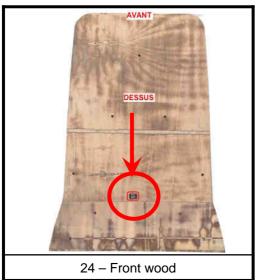


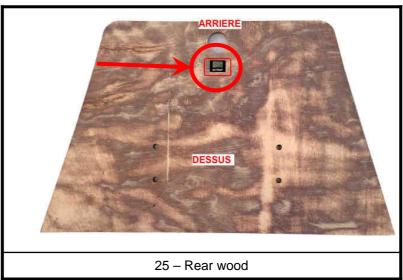


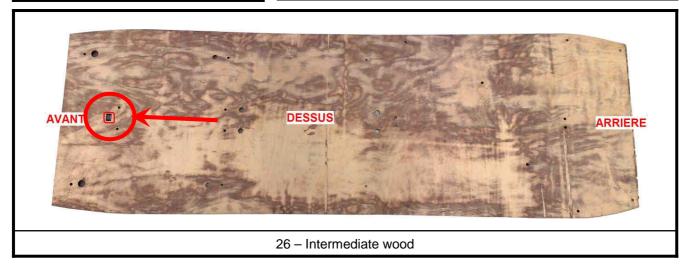










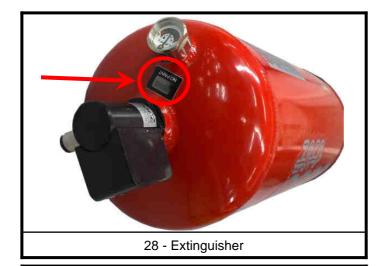


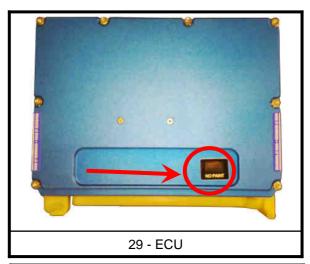


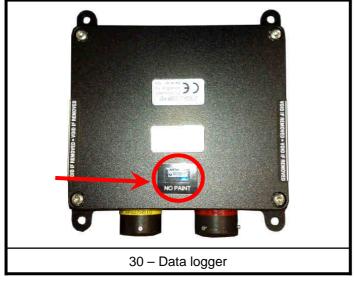


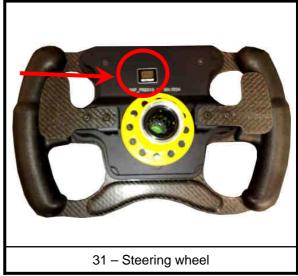














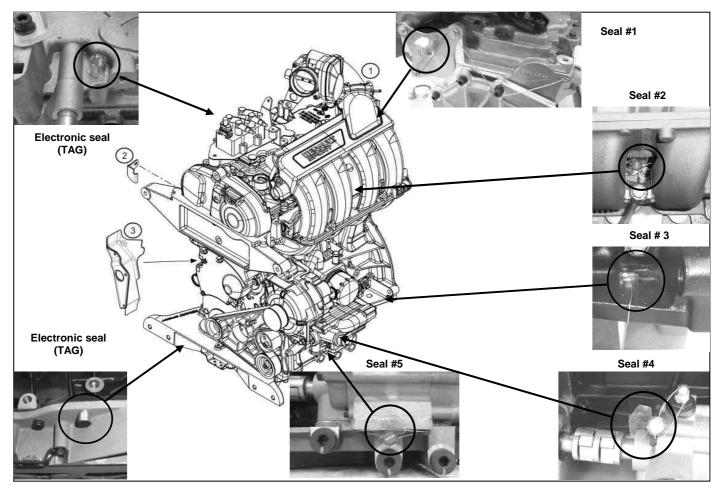






10.00

April 4th, 2011



	Α	В	С
1		Х	
2	X		
3	X		

1B: Engine The engine bears seven (7) seals and one tag:

Five (5) mechanical seals placed:

- on the engine sump
- on the ignition target
- on the oil pump
- on the camshaft blanking caps
- on the fuel ramp

Two (2) microchips placed:

- -on the cylinder head, flywheel side.
- -on the dry sump

Seals must remain in place. It is forbidden to carry out any work on the engine

WARNING: competitors are responsible for the condition of seals.

It is **compulsory** to use the following **engine lubricant**: **Elf Excellium NF 5W40** No additive is allowed.

Every engine must be tested on the dyno in order to control its performance and the installation of the 2011 seals. The motorist named by Renault Sport will be responsible for the dyno test. If this article is not respected, it will be considered as a technical non conformity.

It is allowed to shorten the exhaust manifold stud which is the most at the rear of the cylinder head (flywheel side), in order to unmount the exhaust manifold more easily.





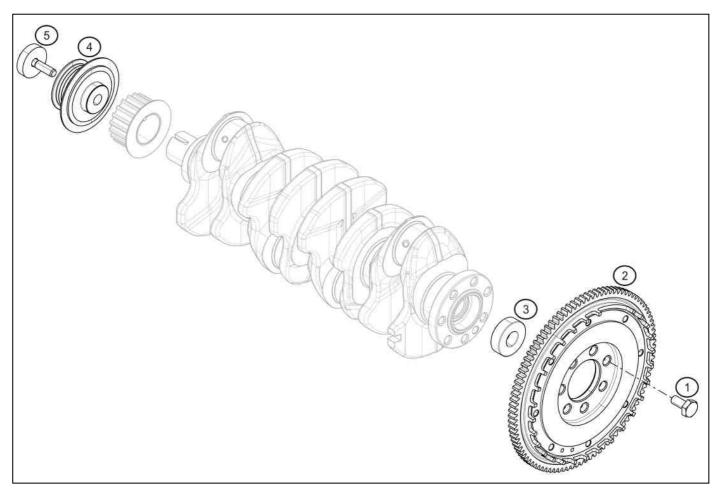






10.60

April 4th, 2011



	Α	В	С
1	Х		
2		Х	
3	X		
4	Х		
5	X		

2B: Engine flywheel

Minimum weight: 1830g without fixation screws and taking into account the clutch surface wear.



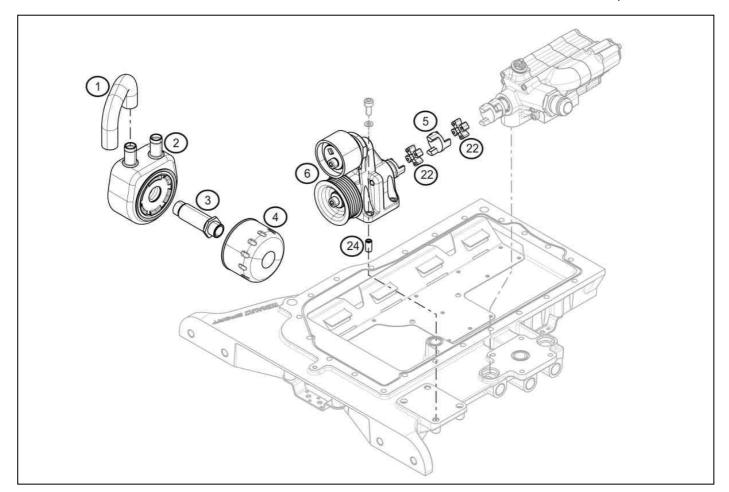








10.70



	Α	В	С
1			Х
2	Х		
3	Х		
4	Х		
5	Х		
6	Х		
22	Х		
24	Х		





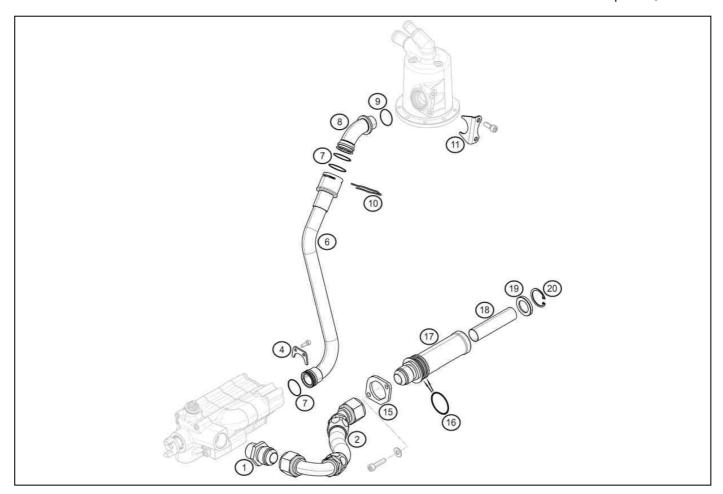






10.80

April 4th, 2011



	Α	В	С
1	Х		
2		Х	
4	Х		
6		Х	
7			Х
8		Х	
9			Х
10	Х		
11	Х		
15	Х		
16			Х
17	Х		
18	Х		
19	Х		
20	Х		

2B - 6B - 8B : Oil pipes

A protective covering can be used on the pipes.



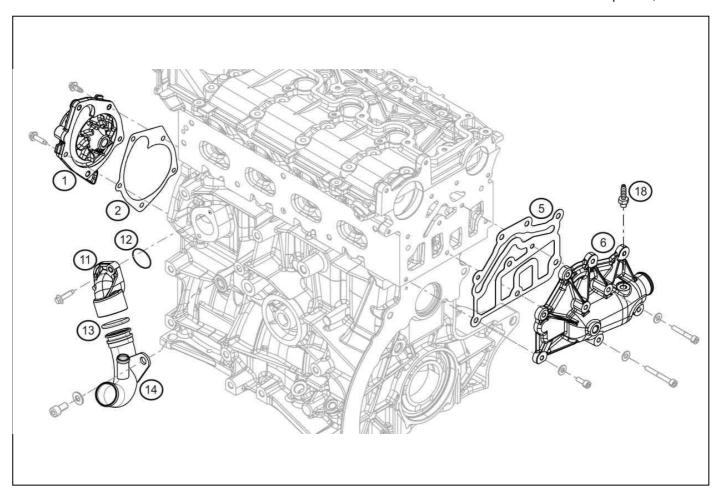








11.00



	Α	В	С
1	Х		
2	X		
5	Х		
6	X		
11	Х		
12			X
13			Χ
14	Х		
18	X	·	

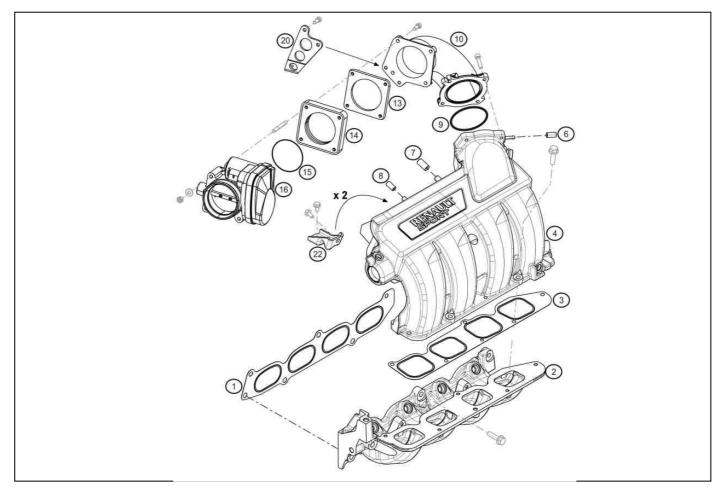








12.00



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
6			Х
7			Χ
8			Х
9	Х		
10	Х		
13	Х		
14	Х		
15	Х		
16	Х		
20	Х		
22	X		





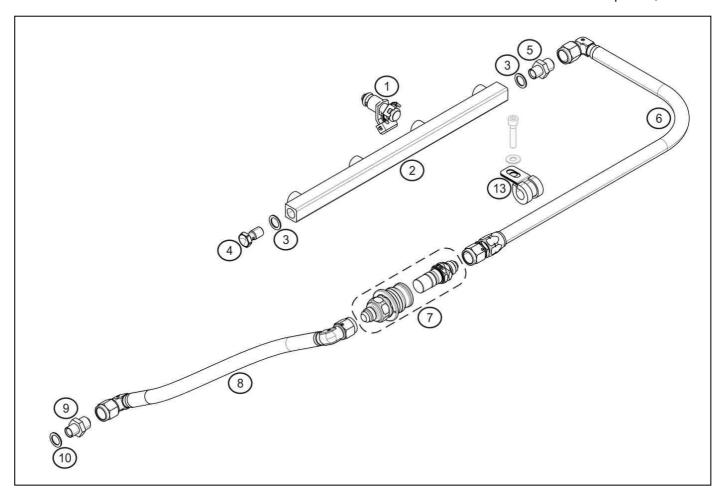








12.50



	A	В	C
1	X		
2	X		
3			X
4	X		
6	X		
7	X		
8	X		
9	X		
10	X		
13			X



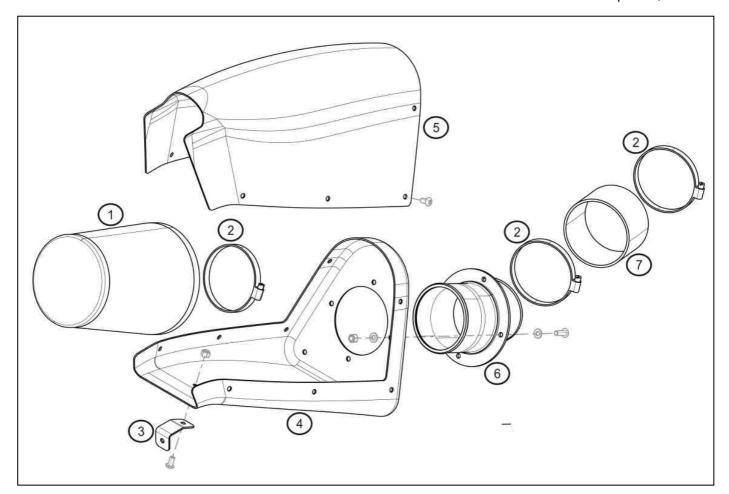






13.50

April 4th, 2011



	Α	В	С
1	Х		
2			X
3		Х	
4		Х	
5		Х	
6		Х	
7	Х		

3B: Front air box bracket

This bracket is unrestricted.

4B - 5B - 6B : Air box

It is allowed to improve sealing between the different elements composing the airbox.

4B: Air box

It is allowed to use captive nuts to fit the upper part.

6B: Air duct

It is allowed to grind the weld bead situated inside the duct and exclusively this one.



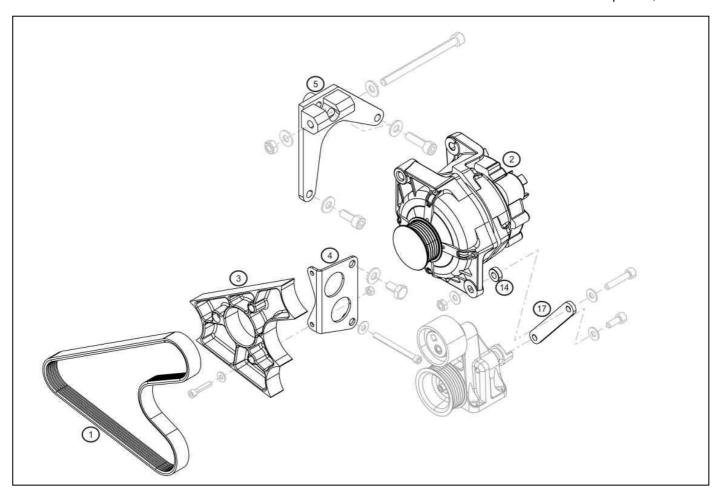








16.00



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
5	Х		
14			Х
17	Х		



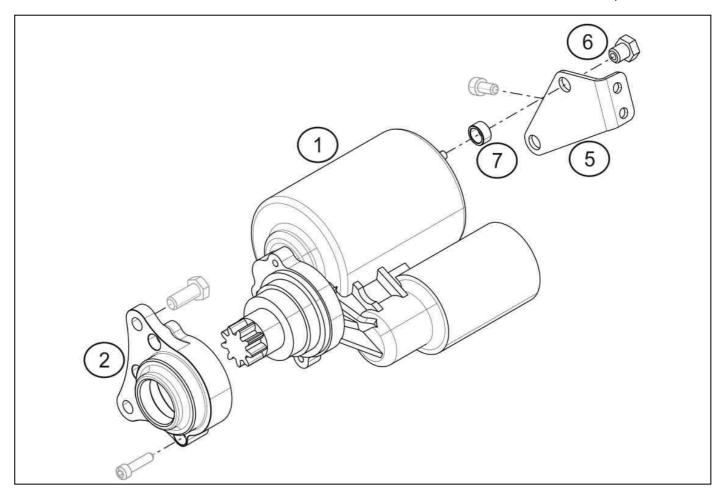








16.10



	Α	В	С
1	Х		
2	X		
5	X		
6	X		
7	Х		





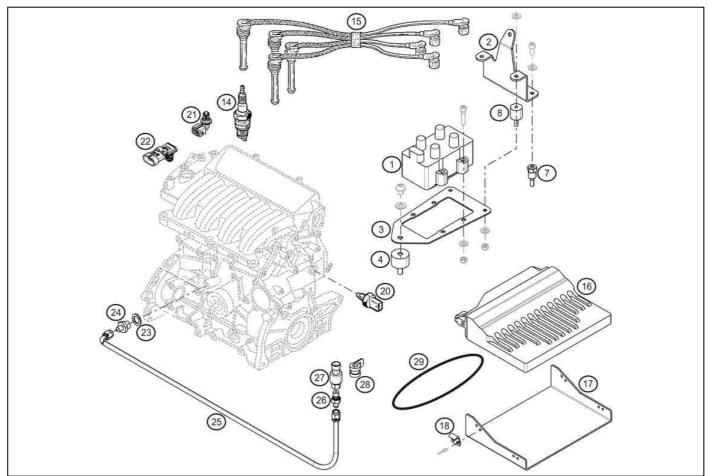




NOMENCLATURE REGLEMENT TECHNIQUE 2011

April 4th, 2011

17.00



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
7	Х		
8	Х		
14	X		
15	X		
16	Х		
17	Х		
18	Х		
20	Х		

	Α	В	С
21		Х	
22		Х	
23			Х
24	Х		
25	Х		
26	Х		
27	Х		
28	Х		
29			Х

21B - 22B : Sensors

It is allowed to improve sensor fitting.





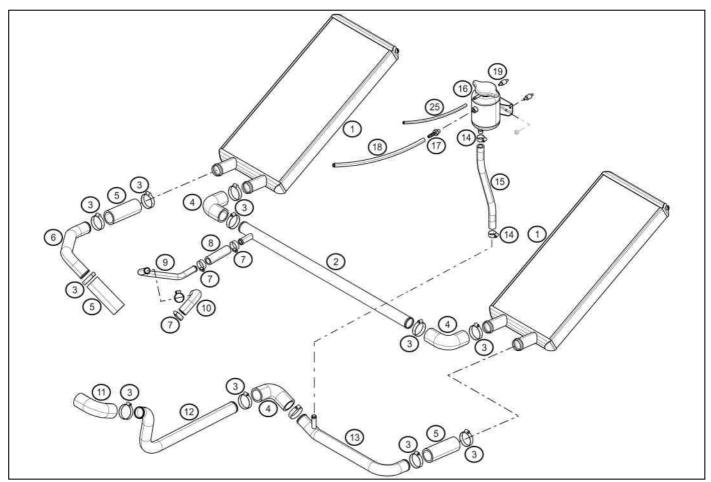






19.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3			Х
4			X
5			Х
6		X	
7			Х
8			X
9		X	
10			Х
11			X

	Α	В	С
12		X	
13		Х	
14			X
15			X
16	Х		
17	X		
18		X	
19	Х		
25		X	

1B: Water radiator

li is allowed to:

- improve sealing between radiators and their support.
- improve their fitting.

2B - 6B - 9B - 12B - 13B : Water pipes

It is allowed to fit a wrap/sheathing protection on the pipes.

18B - 25B : Rubber hoses

The rubber hoses are free but the internal diameter of the replacement hoses cannot be smaller than the diameter of the original ones.





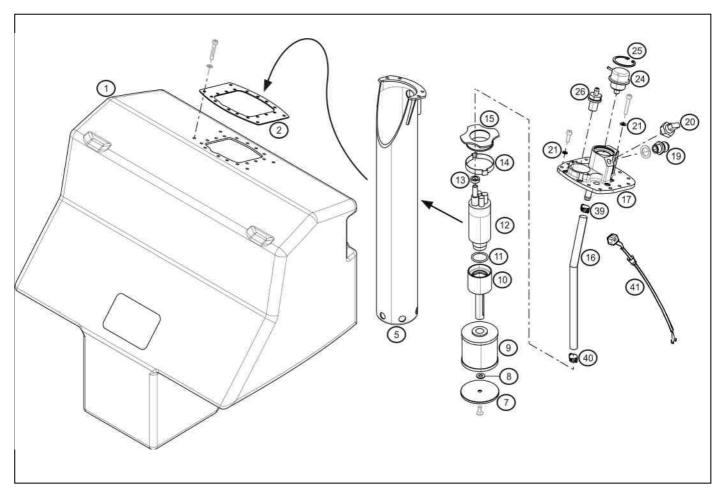






19.30

April 4th, 2011



	Α	В	С
1		X	
2	Х		
5	X		
7	Х		
8	Х		
9		X	
10	X		
11			X
12		Х	
13	Х		
14	X		
15	Х		

	Α	В	С
16			Χ
17	Х		
19	Х		
20	Х		
21	X		
24	Х		
25	Х		
26	Х		
39	Х		
40	Х		
41	X		

1B: Fuel tank

2 types of fuel tank are allowed : - Ref. : 7711 166 002 - Ref. : 7711 166 665

9B: Fuel filter

2 types of fuel filter are allowed : - Ref. : 7711 154 671 - Ref. : 7711 161 845

12B: Fuel pump

It is allowed to fit a system preventing the connectors of the fuel pump loom from getting loose.





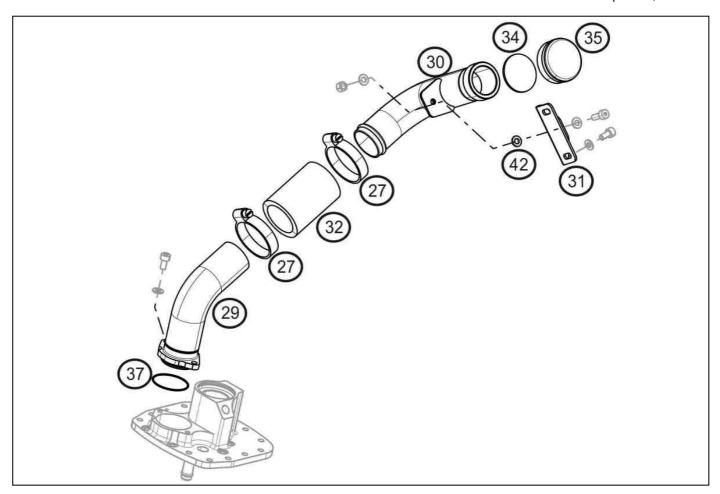






April 4th, 2011

19.31



	Α	В	С
27			Х
29	Х		
30	X		
31	X		
32			Х
34	Х		
35		Х	
37	X		
42	X		

35B : Tap

It is allowed to fit a retaining system. This system can only be glued on the tap.





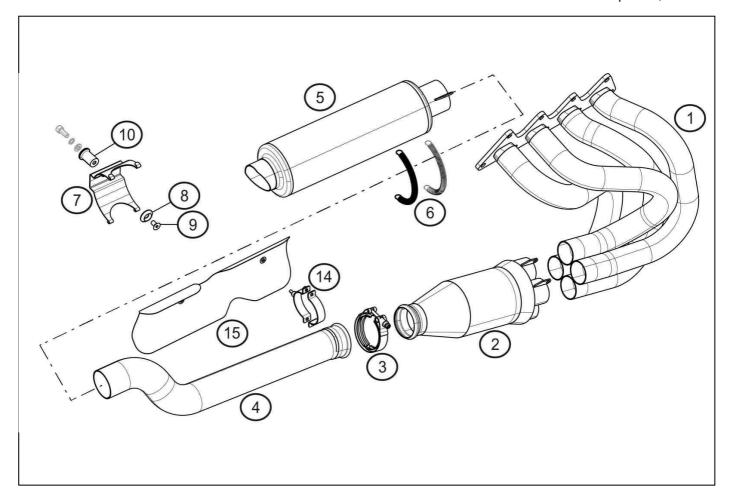






19.50

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
4		Х	
5		X	
6	Х		
7		Х	
8	Х		
9			Х
10	Х		
14	X		
15	X		

<u>1B - 2B - 4B - 5B - 7B : Exhaust elements</u>

It is allowed to repair the exhaust elements respecting the original dimensions and functions.

Adding reinforcement is forbidden

Part assembly systems can be replaced by bolts.

1B: Exhaust manifolg

It is allowed:

- to use heat wrap on the exhaust manifold.
- to add any type of paint on the outer surface

2B: Catalytic converter

2 types of catalytic converters are allowed : - Ref. : 7711 166 121

- Ref.: 0711 166 121

5B: Silencer

2 types of silencer are allowed: - Ref. : 7711 166 123 - Ref.: 7711 166 124

3B : Exhaust clamp

The length of the screw of the clamp is free





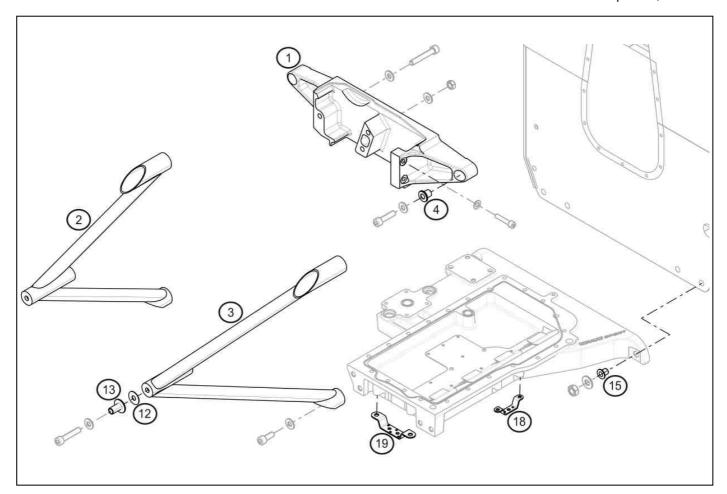






19.80

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3		Х	
4	Х		
12		Х	
13	Х		
15	X		
18	Х		
19	Х	·	

3B: Right hand side frame

It is allowed to had a heat protection (heat wrap type).

12B: Shim

Two types of shims can be used to set-up the frames position:

- reference 77 11 166 159 : 0,5 mm thickness
- reference 77 11 166 160 : 1 mm thickness

They can be placed behind all the fitting points of the frames.





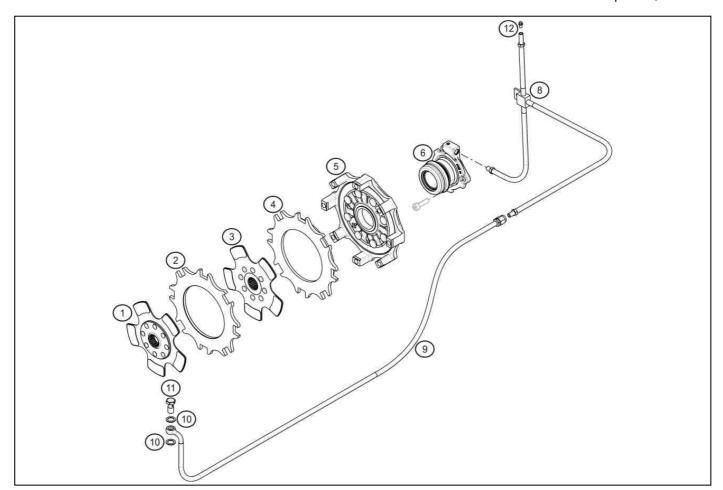






20.00

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	Α	В	С
1	Х		
2	Х		
3	X		
4	Х		
5		X	
6		X	
8		X	
9		X	
10			Х
11	Х		
12	X		

8B - 9B : Clutch hose

It is allowed to add a quick coupling device on the clutch line.

5B - 6B : Clutch

Two types of clutch releaser are allowed:

- Ref. : 77 11 166 678 (with bonded ring)

- Ref. : 77 11 166 030

Two types of clutch mechanism are allowed:

- Ref.: 77 11 166 679 (without ring)

- Ref.: 77 11 166 024

In case of use of releaser ref.: 77 11 166 030, it is mandatory to use mechanism ref.: 77 11 166 024.

In case of use of releaser ref. : 77 11 166 678, it is mandatory to use mechanism ref. : 77 11 166 679.





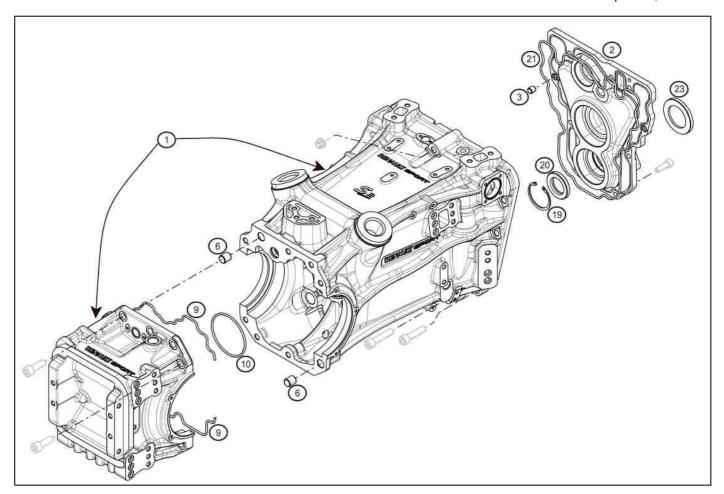






21.10

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	Α	В	С
1		Х	
2	X		
3	X		
6	Х		
9			Х
10	X		
19	X		
20	X		
21	Х		
23	Х		

1B : Gearbox casing

It is allowed to repair the various fitting points if some metal has been torn off.

Only modified casings with the Sadev reference F1910029 engraved are allowed.

It is compulsory to use the following gear box lubricant: Elf HTX 755 (80W140)

No additive is allowed.



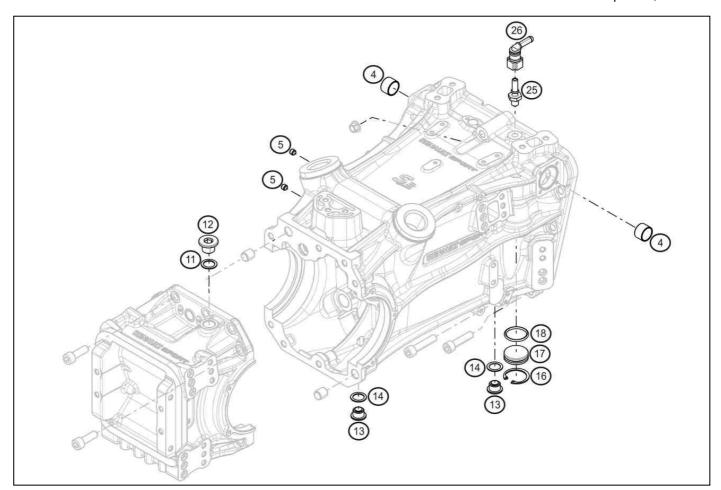








21.11



	Α	В	С
4	Х		
5	Х		
11			Х
12			Х
13			Х
14			Х
16	Х		
17	Х		
18	Х		
25	Х		
26	Х		



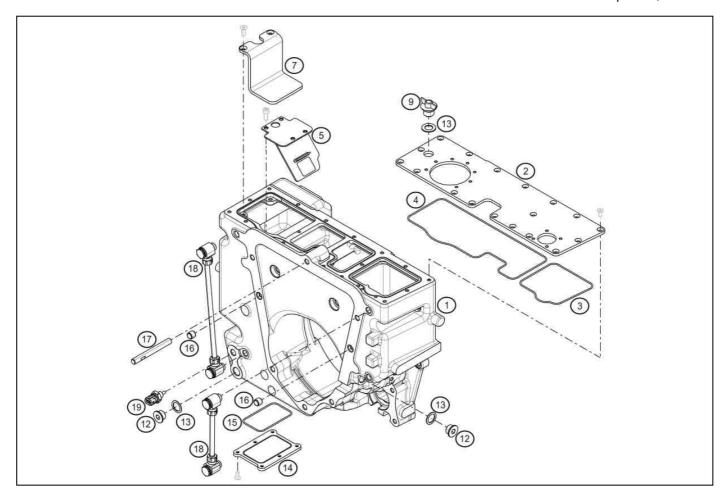






21.15

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3	Х		
4	Х		
5	Х		
7	Х		
9			Х
12			Х
13			X
14	Х		
15	Х		
16	X		
17	Х		
18	Х		
19	X		

1B: Bell housing

It is allowed to repair the various fitting points if some metal has been torn off.

Only bell housings with at least one star engraved on the boss of stud (17) are allowed.





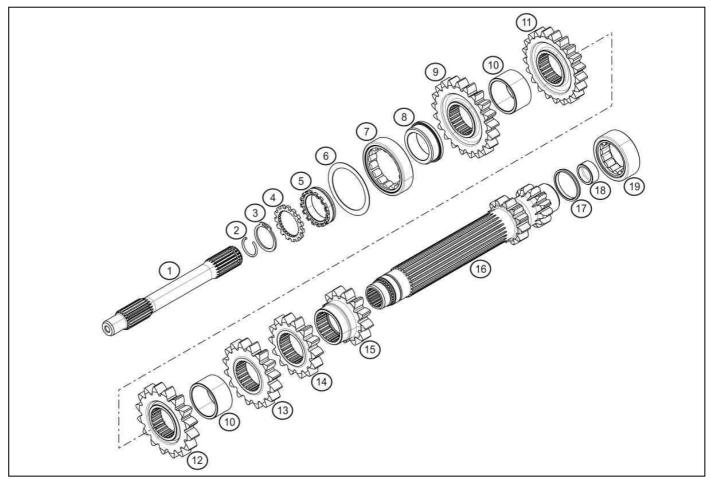






21.20

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	X		
4	Х		
5	Х		
6	X		
7	X		
8	X		
9		X	
10	Х		
11	Х		

	Α	В	С
12	X		
13	X		
14	Х		
15	Х		
16	Х		
17	Х		
18	Х		
19	Х		

9B: 7th gear ratio

2 types of 7th gear ratio are allowed :

Long ratio : 21x20 reference 33 80 132 120 Standard ratio : 24x24 reference 33 80 132 424







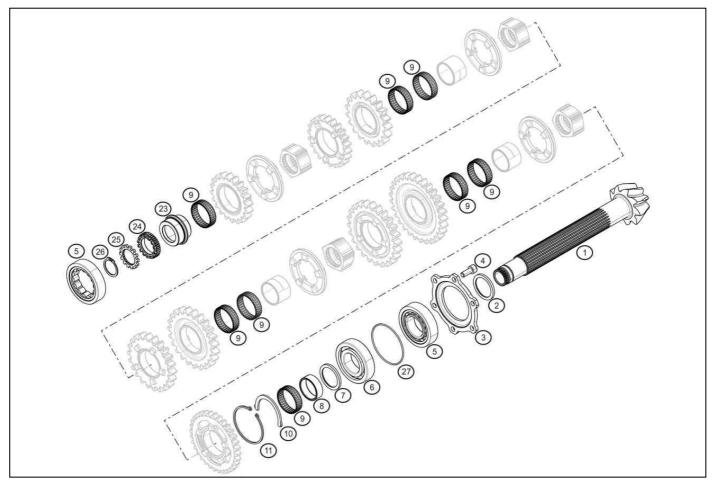






21.30

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	Α	В	С
1	Х		
2		Х	
3	Х		
4	Х		
5	Х		
6	Х		
7	·	Х	
8	Х		
9	Х		

	Α	В	С
9	Х		
10	Х		
11	Х		
23	Х		
24	Х		
25	Х		
26	Х		
27	X		

2B : Shaft advance shim

Several shim thicknesses (ref. F1910205) are allowed: from 3.05 mm to 4 mm by steps of 0.05 mm.

7B : Gears shim

Several shim thicknesses (ref. F1910212) are allowed: from 3.05 mm to 4 mm by steps of 0.05 mm.





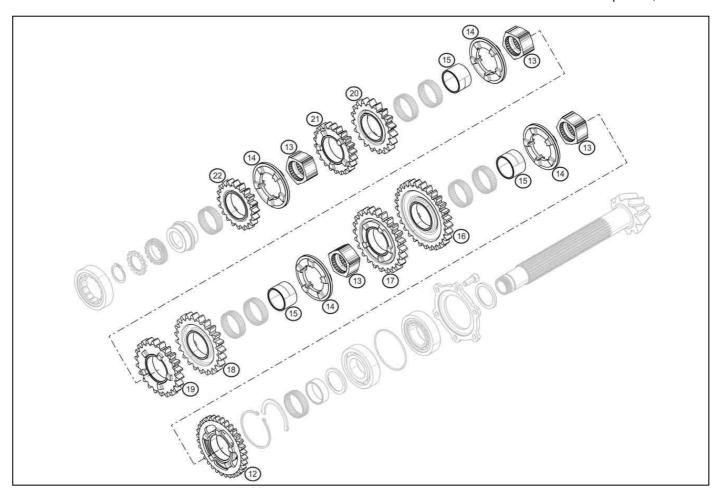






21.31

April 4th, 2011



	Α	В	С
12	Х		
13	Х		
14	X		
15	Х		
16	Х		
17	X		
18	X		
19	X		
20	Х		
21	Х		
22		Х	

22B: 7th gear ratio

2 types of 7th gear ratio are allowed :

Long ratio: 21x20 reference 33 80 132 120 Standard ratio: 24x24 reference 33 80 132 424





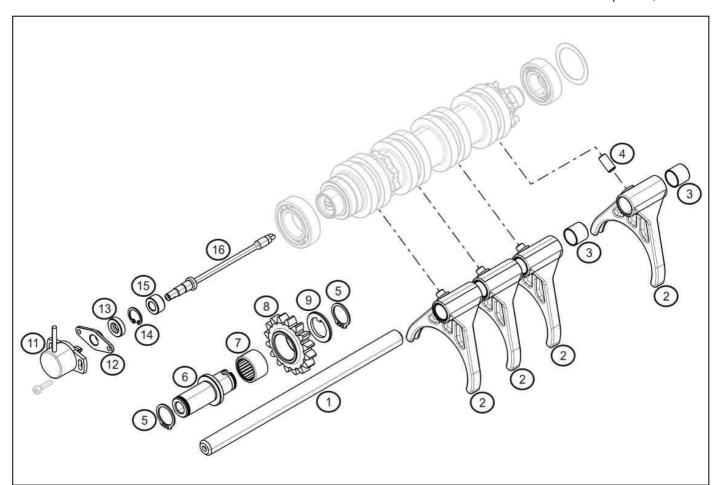






21.40

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
5	Х		
6	Х		
7	Х		
8	Х		
9	Х		
11	Х		
12	Х		
13	Х		
14	Х		
15	Х		
16	Х		

RENAULT SPORT



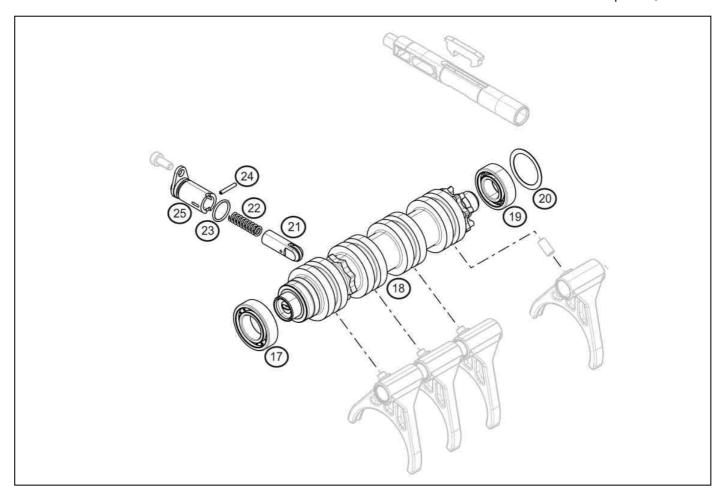








21.41



	Α	В	С
17	Х		
18	X		
19	Х		
20	Х		
22	X		
21	Х		
23	Х		
24	Х		
25	Χ	·	



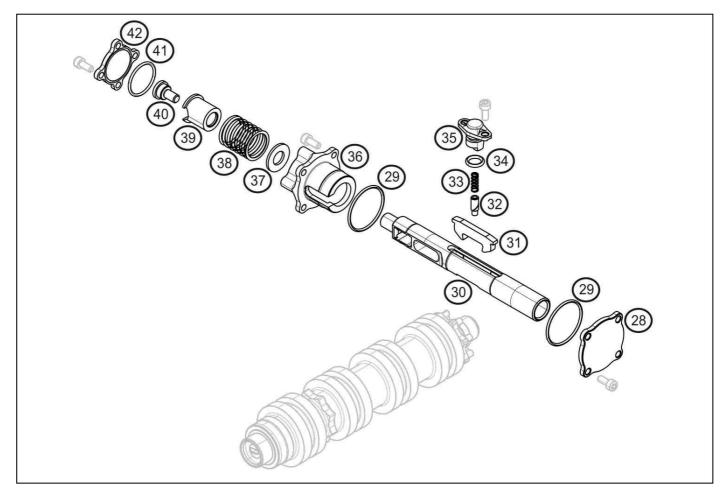








21.42



	Α	В	С
28	Х		
29	Х		
30	Х		
31	X		
32	X		
33	Х		
34	Х		
35	Х		
36	Х		
37	X		
38	X		
39	Х		
40	Х		
41	Х		
42	Х		



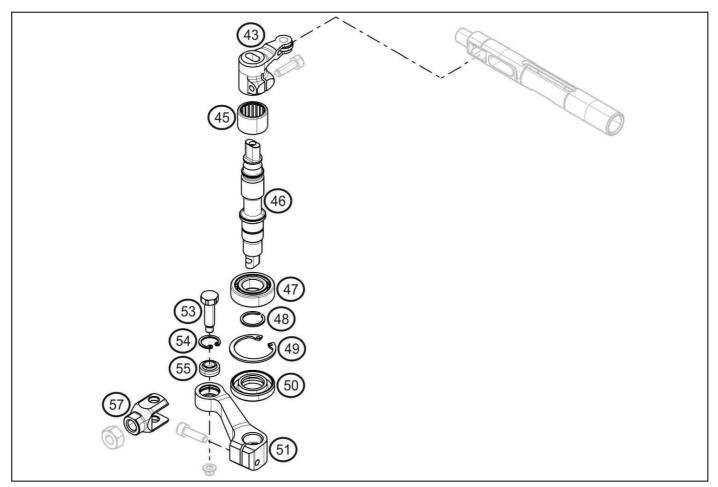








21.43



	Α	В	С
43	X		
45	X		
46	Х		
47	Х		
48	Х		
49	Х		
50	Х		
51	Х		
53	Х		
54	Х		
55	Х		
57	Х		



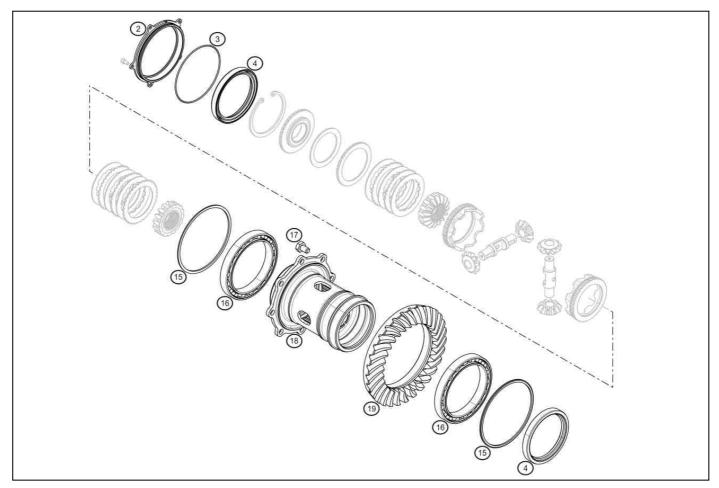






21.50

April 4th, 2011



	Α	В	С
2	Х		
3	X		
4	Х		
15		Х	
16	X		
17	Х		
18	Х		
19	Х		

15B: Tooth clearance shim

Several shim thicknesses (ref. F1910320) are allowed: from 2.4 mm to 3.2 mm by steps of 0.05mm.





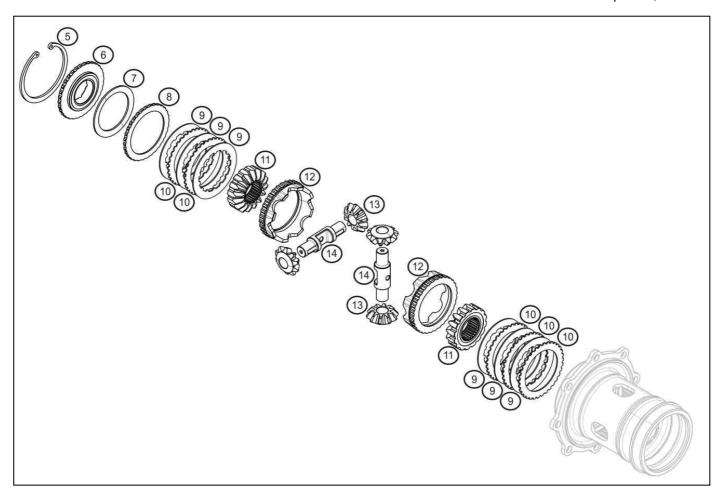






21.51

April 4th, 2011



	Α	В	С
5	Х		
6	Х		
7		Х	
8		Х	
9		Х	
10		Х	
11	X		
12		X	
13	Х		
14	Х		

7B: « Belleville » Washers

2 types of « Belleville » washers are allowed:

curve: 1 mm - ref: 0101 910 314 thickness 2 mm +0.02/-0.08

8B: « Belleville » race

3 types of « Belleville » race are allowed:

- ref: 0191 030 742 4,2 mm thickness - ref: 0191 030 743 4,3 mm thickness - ref: 0191 030 744 4,4 mm thickness

9B: Core discs

Ruled thickness: 1,75 mm +0.02/-0.10

10B: Friction discs

Rules thickness: 1.75 mm +0.02/-0.06

12B: Differential ramps

It is allowed to swap the directions of the differential ramps

Mandatory preload setting:

The Genuine stack must be respected. It must achieve a maximum preload of 2,5 + 0,5 DaN/m and no play is allowed between the stack cover plate (6) and the circlip (5).

The non respect of the stack order or of the preload value will be considered as a non conformity.

Differential preload will be measured with differential out of the gearbox





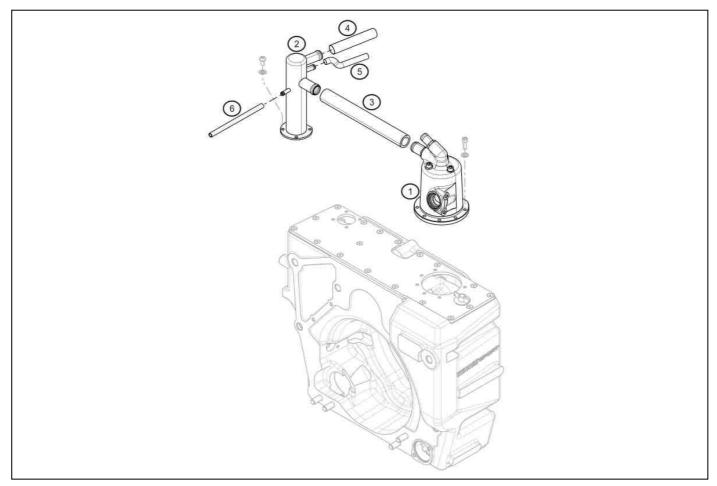






22.00

April 4th, 2011



	A	В	C
1	X		
2	X		
3		X	
4		X	
5		X	
6		X	

<u>3B - 4B - 5B - 6B : Rubber hoses</u>

The rubber hoses are free but the internal diameter of the replacement hoses cannot be smaller than the diameter of the original ones.





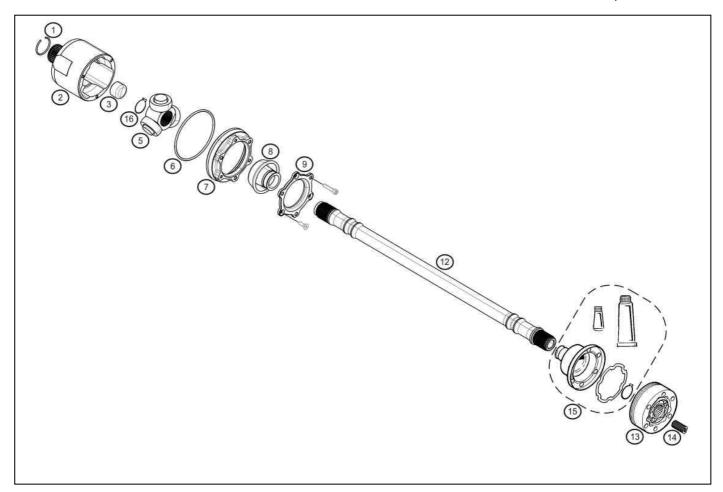






29.00

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
5	X		
6	X		
7	Х		
8	X		
9	Х		
12		Х	
13	Х		
14	Х		
15	Х		
16	Х		

12B : Drive shaft

It is allowed to polish the driveshaft. No other treatment is allowed The genuine engraving with the part reference must still be readable.



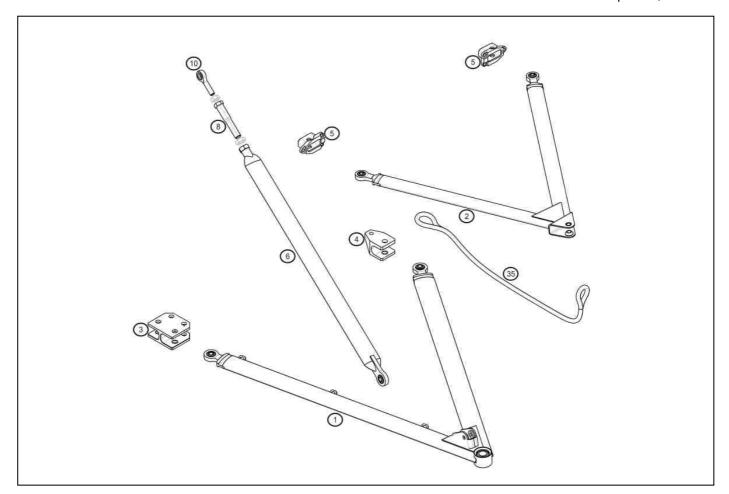






31.00

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3		Х	
4	X		
5	Х		
6	Х		
8		Х	
10	X		
35	Х		

1B: Front lower wishbone

It is allowed to improve the fastening of the pipes and wires along the wishbone, using black tape exclusively.

3B: Lower wishbone bracket

It is allowed to do a mark (with a drill bit).

8B: Pushrod register

2 types of register are allowed:

ref: 77 11 166 252 ref: 77 11 166 340





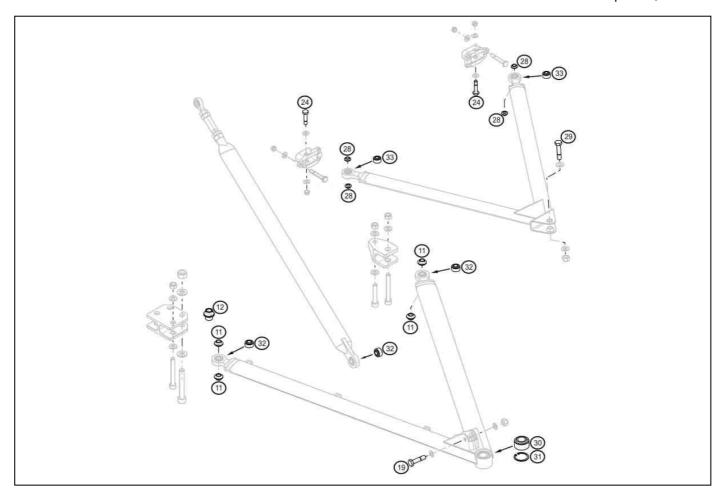






31.01

April 4th, 2011



	Α	В	С
11	X		
12	Х		
19	X		
24	Х		
28	X		
29	X		
30	X		
31	X		
32	Х		
33	Х		



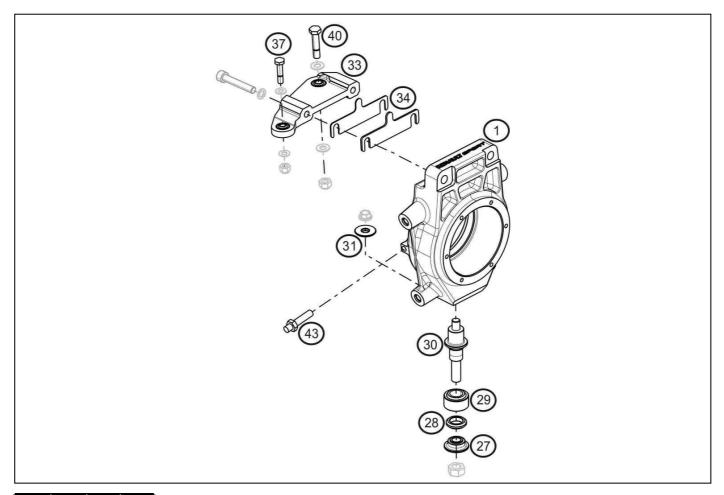






31.40

April 4th, 2011



	Α	В	С
1	Х		
27	Х		
28		Х	
29	X		
30	X		
31	X		
33	X		
34		X	
37	Х		
40	Х		
43	Х		

28B: Roll centre height shim

Its presence is not compulsory. It can be either placed on top or under the uniball (29)

34B: Front camber shims

Five types of shim are allowed:

1,0 mm thickReference 77 11 166 2221,5 mm thickReference 77 11 166 2232,0 mm thickReference 77 11 166 2243,0 mm thickReference 77 11 166 2255,0 mm thickReference 77 11 166 226

A minimum of one shim is compulsory.





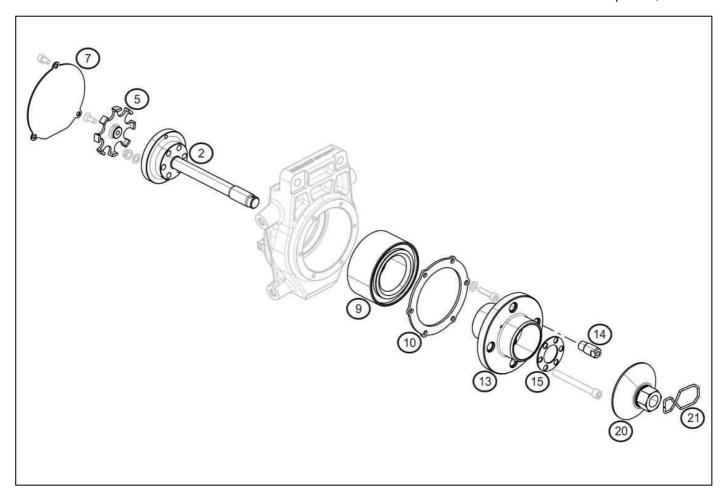






April 4th, 2011

31.41



	Α	В	С
2	Х		
5	X		
7	Х		
9	Х		
10	Х		
13	X		
14	X		
15	X		
20		Х	
21	X		

20 B : Wheel nut

The wheel nut snap ring is unrestricted.





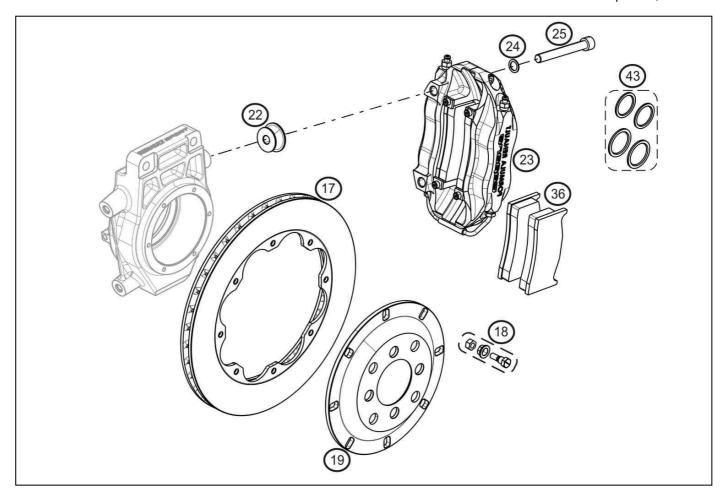






31.42

April 4th, 2011



	Α	В	С
17		Х	
18	Х		
19	X		
22	X		
23	X		
24			Х
25	X		
36		X	
43	Χ		

17B : Brake Disc

The minimum thickness between the two friction faces cannot be lower than 16,5 mm.

36B: Brake pads

2 types of brake pads are allowed:

- "Ferodo" brake pads ref. : 77 11 166 277

- "Pagid" brake pads ref. : 77 11 166 677





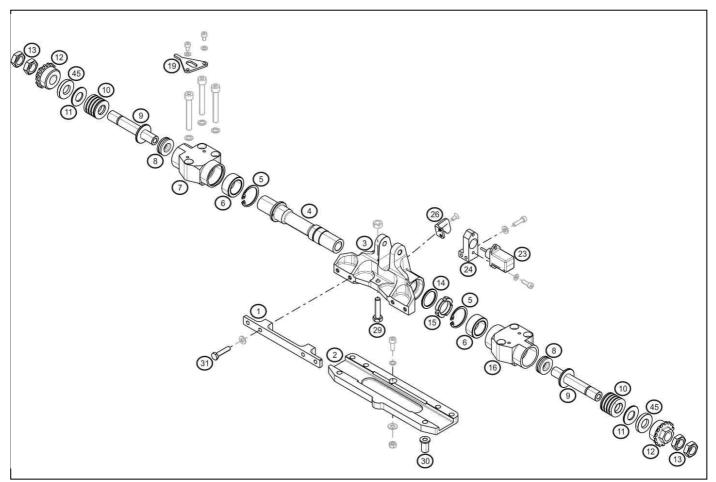






32.00

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
5	Х		
6	Х		
7	Х		
8	Х		
9	Х		
10		Х	
11	Х		
12	Х		
13		Х	
14	Х		

	Α	В	С
15	Х		
16	X		
19	Х		
23		Х	
24	Х		
26			X
29	X		
30	Х		
31	Х		
45	·	Х	·

10B: « Belleville » washers

The stack and the number of « Belleville » washers are free. One only type of « Belleville »washer is allowed:

Reference : 7711166510Thickness : 2 + 0.04 et - 0.12 mm

13B: Anti-roll bar nuts

It is allowed to remove the counter nuts.

23B: Front roll sensor

It is allowed to add a plastic cap on the sensor's rod.

45B: Stack spacers

Three types of spacers are allowed: References: 77 11 166 273 – 3 mm thick

77 11 166 274 – 5 mm thick

77 11 166 275 - 8 mm thick

It is allowed not to use spacers.





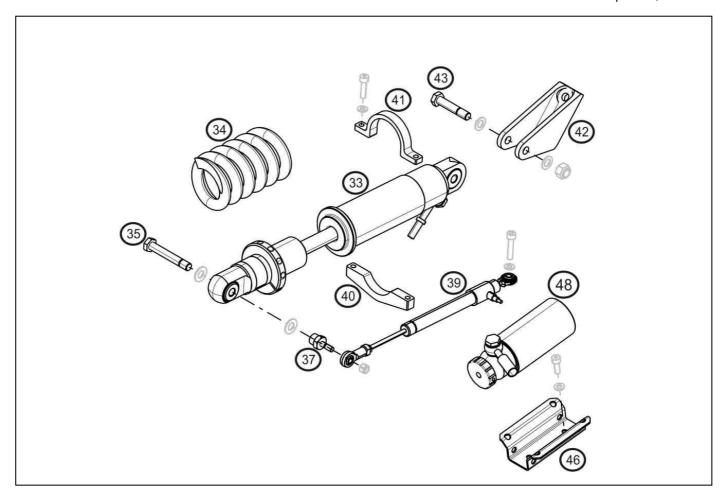






32.02

April 4th, 2011



	Α	В	С
33		Х	
34		Х	
35	X		
37	Х		
39	Х		
40	X		
41	Х		
42	Х		
47	Х		
48	Χ		

33B : Front damper

It is allowed to use metallic retaining screws to maintain the upper spring seat.

<u>34B : Front suspension springs</u>
Three types of springs are allowed. They must be genuine RENAULT SPORT parts.

700 lbs/inch Reference: 7711166040 800 lbs/inch Reference: 7711166041 900 lbs/inch Reference: 7711166042





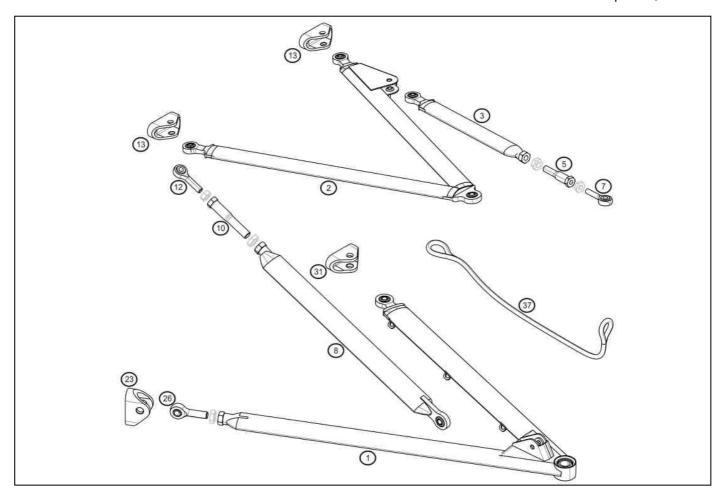






33.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
5	Х		
7	Х		
8		Х	
10		Х	
12	X		
13	Х		
23		Х	
26		Х	
31		Х	
37	Х		

1B: Rear lower wishbone

It is allowed to improve the fastening of the pipes and wires along the wishbone, using black tape exclusively.

1B - 26B: Uniball setup

3 different Uniball positions are allowed, depending on the rear wishbones setup. A tolerance of \pm 1.5mm is permitted on the nominal quotes for each position.

The nominal positions that are allowed are detailed in the 2011 User Manual.

1B - 2B - 3B - 8B : Right hand side wishbones and toe rod

It is allowed to add a heat protection to protect the parts from the exhaust radiation..

10B: Pushrod register

2 types of register are allowed:

ref: 77 11 166 252 ref: 77 11 166 340

<u>23B - 31B : Wishbone brackets</u>
Their position on the gearbox are ruled. The positions that are allowed are detailed in the 2011 User Manual.





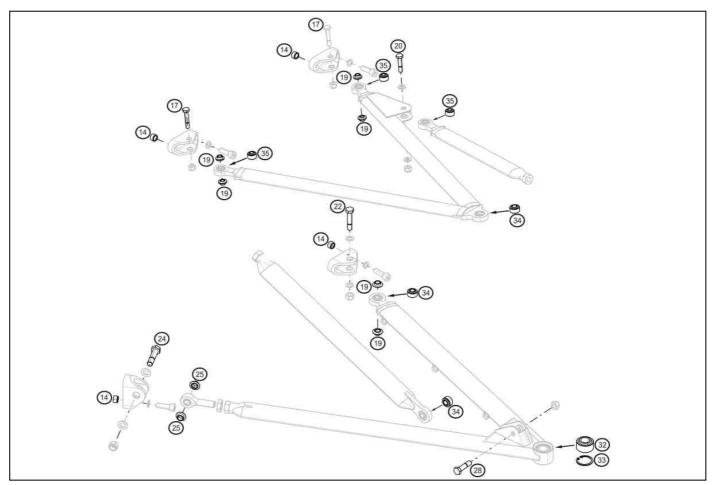






33.01

April 4th, 2011



	Α	В	С
14	Х		
17	Х		
19	X		
20	Х		
22	Х		
24	Х		
25	Х		
28	Х		
32	Х		
33	Х		
34	Х		
35	Χ		



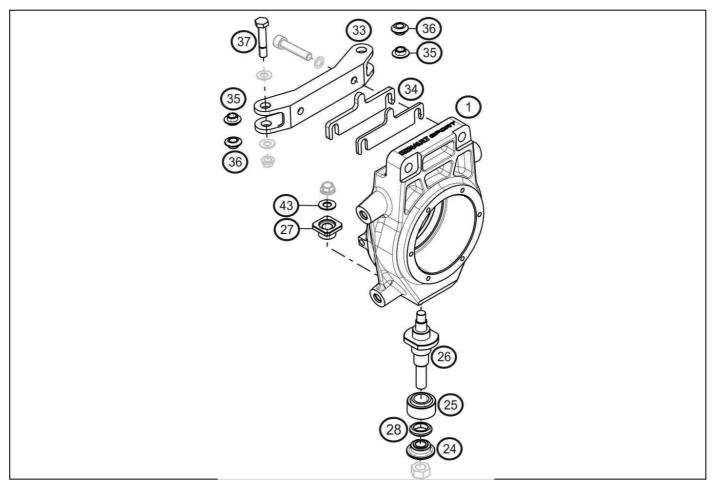






33.40

April 4th, 2011



	Α	В	С
1	Х		
24	X		
25	X		
26		X	
27		X	
28		Х	
33	X		
34		Х	
35		X	
36		X	
37	Х		
43	X		

26B - 27B : Rear upright pin

2 types of mounting are allowed:

- 2010 pin ref.: 7711 166 228 with washer ref.: 7711 166 240

- 2011 pin ref.: 7711 166 696 with washer ref.: 7711 166 368 and nut ref.: 7711

166 695.

28B: Roll centre height shim

Its presence is not compulsory. It can be either placed on top or under the uniball (29). The positions that are allowed are detailed in the 2011 User Manual.

34B: Rear camber shims

Five types of shim are allowed:

1,0 mm thickReference 77 11 166 2221,5 mm thickReference 77 11 166 2232,0 mm thickReference 77 11 166 2243,0 mm thickReference 77 11 166 2255,0 mm thickReference 77 11 166 226

A minimum thickness of five (5) mm must be respected.

35B - 36B : Ball joint spacers

Refer to 2011 User Manual (Chapter B) for the spacer positions.





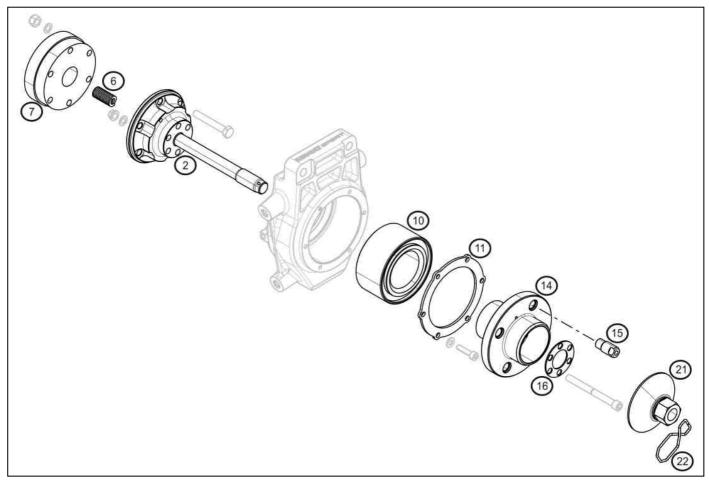






33.41

April 4th, 2011



	Α	В	С
2		Х	
6	Х		
7	X		
10	Х		
11	Х		
14	X		
15	Х		
16	Х		
21		Х	
22	Х		

2B : Hub

It is allowed to obstruct the threaded holes used to dismount the part.

21 B: Wheel nut
The wheel nut snap ring is unrestricted.





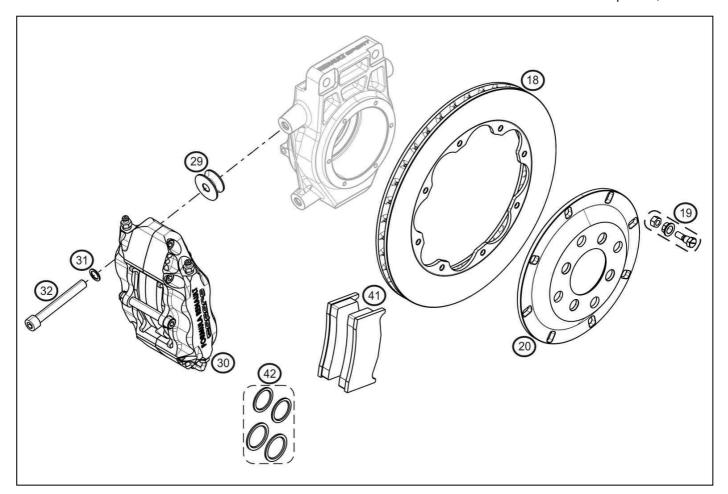






33.42

April 4th, 2011



	Α	В	С
18		Х	
19	X		
20	X		
29	X		
30	X		
31			X
32	X		
41		X	
42	Х		

18B: Brake Disc

The minimum thickness between the two friction faces cannot be lower than 16,5 mm.

41B: Brake pads

2 types of brake pads are allowed:

- "Ferodo" brake pads ref. : 77 11 166 277 - "Pagid" brake pads ref. : 77 11 166 677

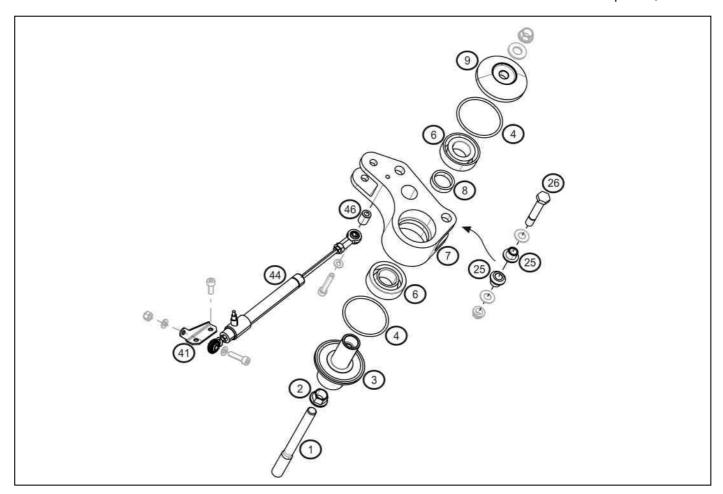






34.00

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
4	Х		
5	Х		
6	Х		
7	Х		
8		Х	
9	Х		
25	Х		
26	X		
41	Х		
44	Х		
46	Χ		

8B : Setting shims

Three (3) types of shims are allowed:

6,30 mm thick - reference 7711166544 6,35 mm thick - reference 7711166545 6,40 mm thick - reference 7711166546





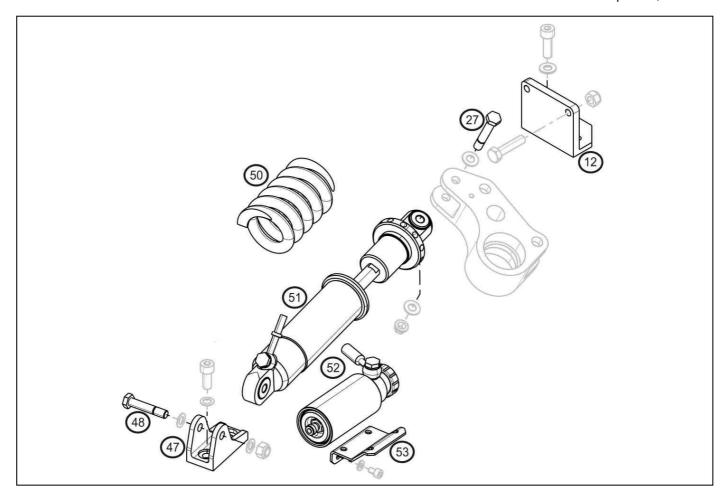






34.01

April 4th, 2011



	Α	В	С
12	Х		
27	X		
47	Х		
48	Х		
50		Х	
51		Х	
52		Х	
53	Х		

50B: Rear suspension springs

Three types of springs are allowed. They must be genuine RENAULT Sport parts.

800 lbs/inch Reference: 77 11 166 041 900 lbs/inch Reference: 77 11 166 042 1000 lbs/inch Reference: 77 11 166 141

51B: Rear damper

It is allowed to use metallic retaining screws to maintain the upper spring seat.

52B: Damper setting

It is allowed to apply a heat protection on the oil tank.





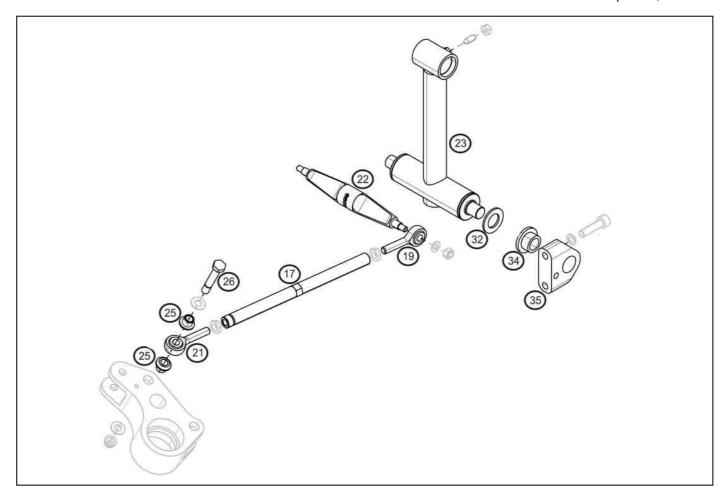






34.02

April 4th, 2011



	Α	В	С
17		Х	
19		Х	
21			X
22		Х	
23		Х	
25	X		
26	X		
32	X		
34	Х		
35	Х		

17B - 19B: Anti-roll bar rod

When the anti roll bar is disconnected, it is allowed to remove the rods. If they are not removed, they must be maintained.

22B: Anti-roll bar blades

2 types of blades are allowed: 5 mm thick reference 7711166532 7 mm thick reference 7711166528

23B: Anti-roll bar

It is allowed to repair the thread of the punch screw.





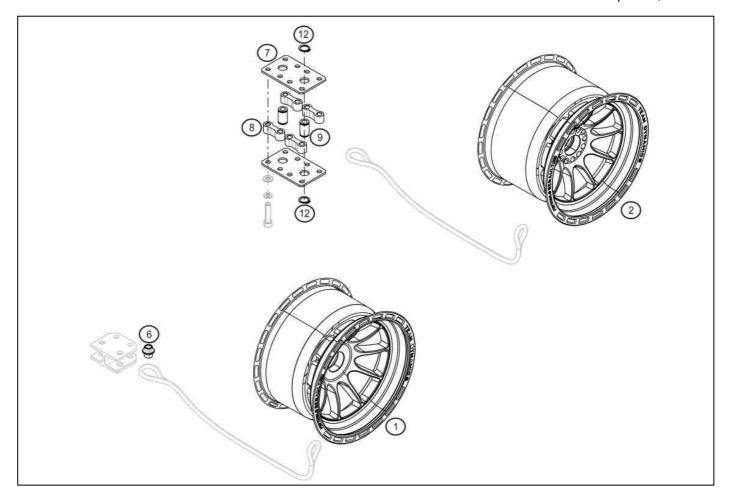






35.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
6	X		
7	Х		
8	Х		
9	Х		
12	Х		

1B - 2B : Wheels

It is allowed to:

- paint the wheel with no dimensional change. The use of colorless paint is forbidden.
- remove the cap of the valve

Relief valves are forbidden.





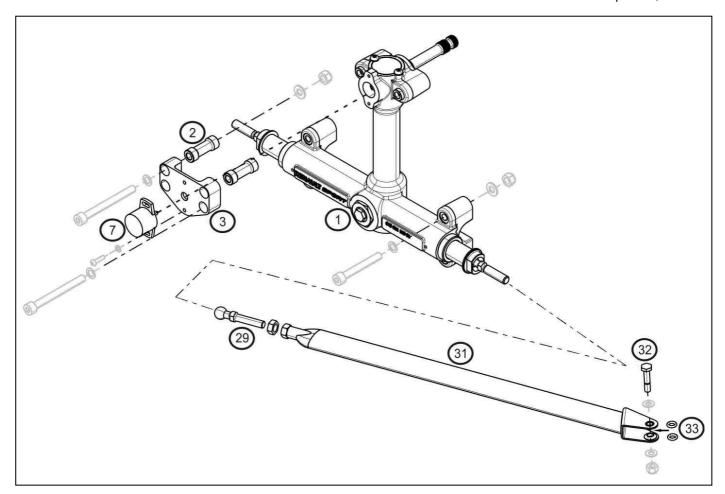






36.00

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3	Х		
7	Х		
29	Х		
31	Х		
32	Х		
33	Х		

1B: Steering box

Bevel gear shimming must follow the prescription of the 2011 User Manual.





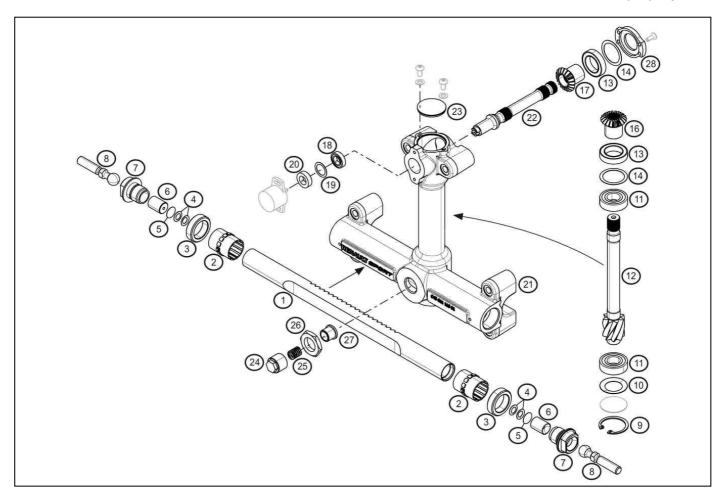






36.00-2

1 Fevrier 2011



	A	В	C
1	X		
2	X		
3	X		
4		X	
5		X	
6	X		
7	X		
8	X		
9	X		
10	X		
11	X		
12	X		
13	X		
14		Х	_

	A	В	C
16	X		
17	X		
18	X		
19		X	
20	X		
21	X		
22	X		
23	X		
24	X		
25	X		
26	X		
27	X		
28	X		

4B: « Belleville » washers

The stack and the number of « Belleville » washers are free. One only type of « Belleville » washer is allowed: Reference: 7711166560

5B: Stack spacers

Two types of spacers are allowed:

Références : 77 11 166 558 – 0,008 inch thick. 77 11 166 559 – 0,018 inch thick.

It is allowed not to use spacers.

14B: Stack spacers

Four types of spacers are allowed:

Références : 77 11 166 572 – 0,20 mm thick. 77 11 166 573 – 0,25 mm thick.

77 11 166 574 – 0,30 mm thick. 77 11 166 575 – 0,38 mm thick.

It is allowed not to use spacers.

19B: Stack spacers

Four types of spacers are allowed:

Références : 77 11 166 564 – 0,15 mm thick.

77 11 166 565 – 0,20 mm thick. 77 11 166 566 – 0,25 mm thick. 77 11 166 567 – 0,30 mm thick.

It is allowed not to use spacers.



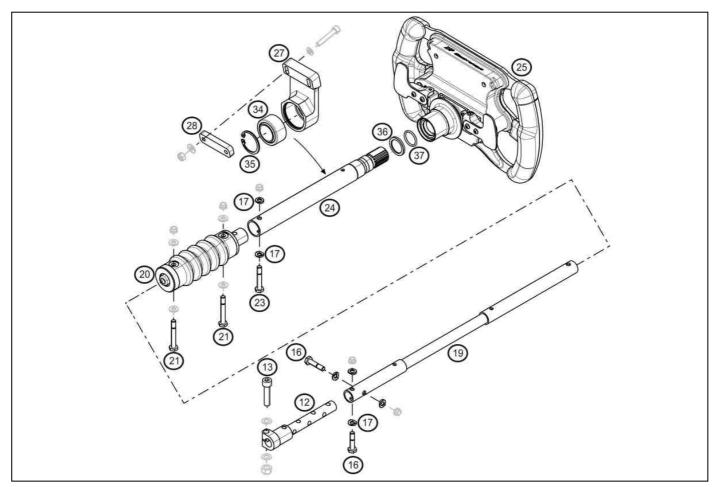






36.01

April 4th, 2011



	Α	В	С
12	Х		
13	Х		
16	Х		
17	Х		
19	Х		
20	х		
21	Х		
23	Х		
24	X		
25		Х	
27	Х		

	Α	В	С
28	Х		
34	X		
35	X		
36	X		
37	X		

25B: Steering wheel

For the driver's comfort, it is allowed to add some tape on the outer rim of the wheel to allow a better grip.

It is allowed:

to modify geometrically the shift paddles.to add a nut on the screws used to setup the

stroke of the paddles.







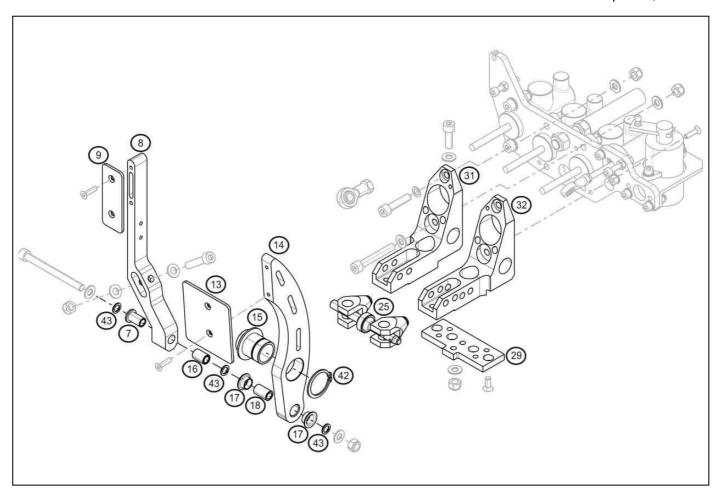






37.00

April 4th, 2011



	Α	В	С
7	Х		
8	Х		
9		Х	
13		Х	
14	Х		
15	X		
16	X		
17	Х		
18	Х		
25	Х		
29	Х		

	Α	В	С
31	Х		
32	X		
42	X		
43	Х		

9B - 13B : Pedals pads

Pedal pads are free.

It is allowed to add spacers between pads (9 & 13) and levers (8 & 14).





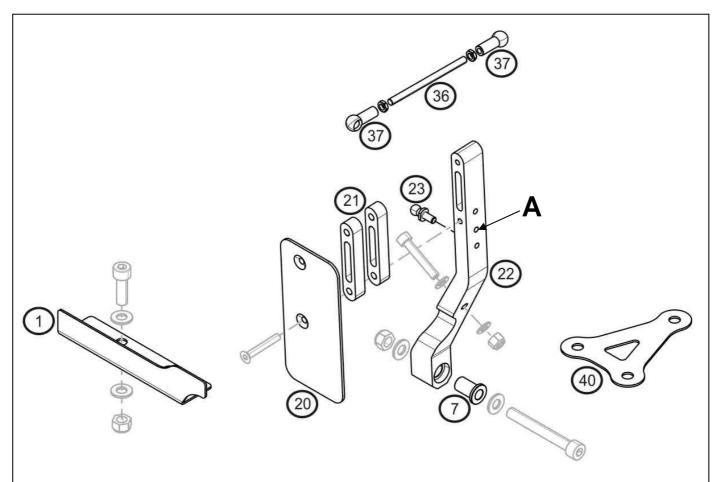






37.00-2

April 4th, 2011



	Α	В	С
1		Х	
7	Х		
20			Х
21		Х	
22	X		
23		Х	
36		Х	
37	Х		
40	Х		

1B: Heel rest

It is allowed to modify the heel-rest following the procedure described in the 2011 User Manual (chapter B).

21B: Throttle pedal spacer

Two types of spacer are allowed:

- 5 mm thick reference 7711166447
- 10 mm thick reference 7711166454

A 10 mm thick spacer must always be present.

23B: Throttle command uniball

Its position on the pedal is ruled: it must be fitted on the middle hole (marked "A")

36B: Throttle command rod

Its length indicated in the 2011 User Manual must be respected.





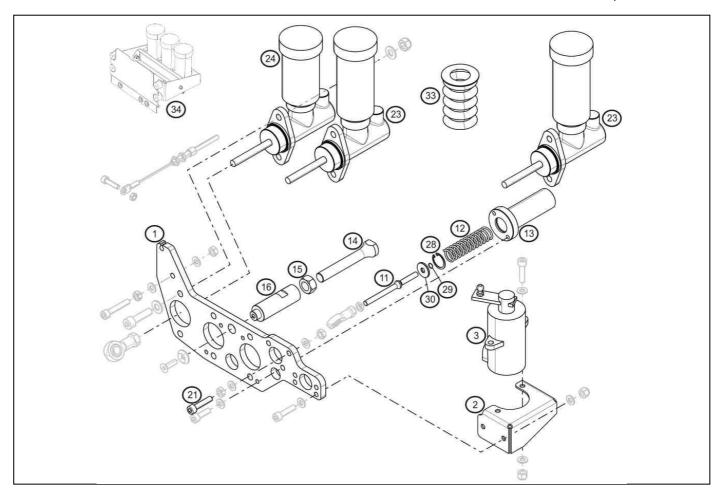






37.01

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
11	Х		
12		Х	
13	Х		
14		Х	
16		Х	

	Α	В	С
21	X		
23		X	
24		Х	
28	X		
29	X		
30	X		
33	X		·
34		X	

12B: Throttle spring

It is allowed to modify the length of the spring, expanded, until a minimum of 75mm.

14B: Pedalbox stop

The stop of the pedalbox must be permanently in contact with the tub. The length of the stop is free when the pedalbox is in the C position (refer to 2011 User Manual).

16B: Pedalbox stop adjuster

2 types of adjuster are allowed:

short adjuster ref: 7711166477long adjuster ref: 7711166446

23B: Brake master-cylinder

3 types of master-cylinder are allowed:

- Ø : 5/8" (15,9 mm) reference : 7711166482 - Ø : 7/10" (17,8 mm) reference : 7711166483 - Ø : 3/4" (19,1 mm) reference : 7711166484

It is allowed to shorten the rods of the brake master-cylinders.





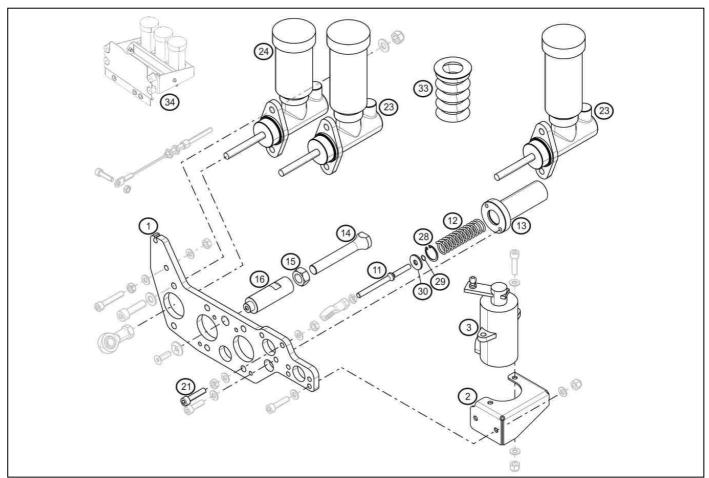






37.01

April 4th, 2011



	Α	В	С
1	Х		
2	Х		
3	Х		
11	Х		
12		Х	
13	Х		
14		Х	
16		Х	

	Α	В	С
21	Х		
23		X	
24		Х	
28	X		
29	X		
30	X		
33	X		
34		X	

24B: Clutch master-cylinder

2 types of master-cylinder are allowed:
-Ø: 5/8" (15,9 mm) reference: 77

reference: 77 11 166 482 or 7711 161 950

- Ø: 14 mm reference: 77 11 166 481

It is allowed to shorten the rods of the clutch master cylinder. It is allowed to add quick coupling device on the clutch line.

34B: Brake and clutch reservoirs' extension

It is allowed to mount kit ref. 7711 166 786



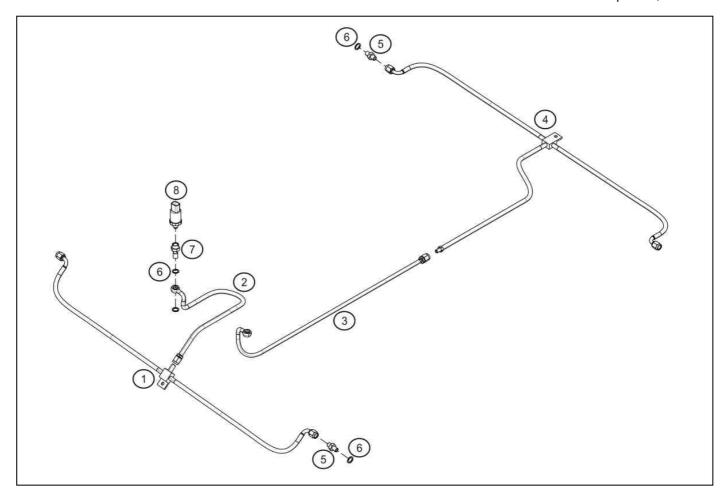






37.80

April 4th, 2011



	A	В	C
1		X	
2		X	
3		X	
4		X	
5	X		
6			X
7	X		
8	X	·	

 $\frac{\textbf{1B} - \textbf{2B} - \textbf{3B} - \textbf{4B}: \textbf{Brake lines}}{\textbf{It is allowed to add quick coupling device on the brake lines}}$



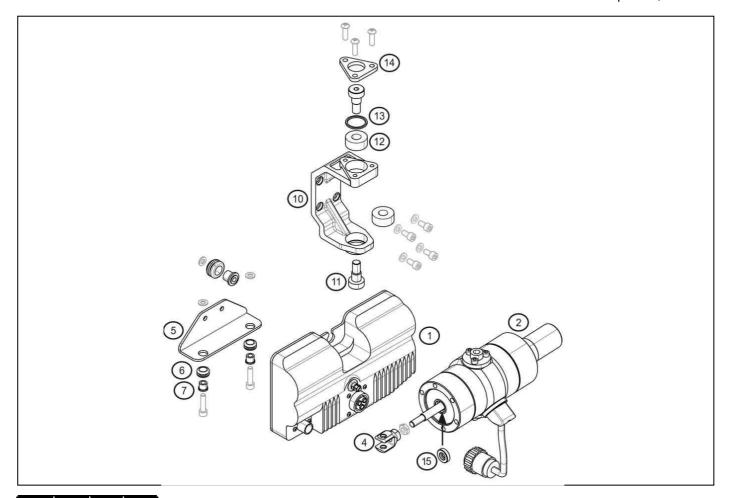






April 4th, 2011

38.00



	Α	В	С
1	Х		
2		X	
4	Х		
5	X		
6	X		
7	X		
10	X		
11	X		
12	X		
13	X		
14	Х		
15	X		

2B : Gearbox actuator

The reinforced actuator supports ref. 77 11 166 586 are allowed.





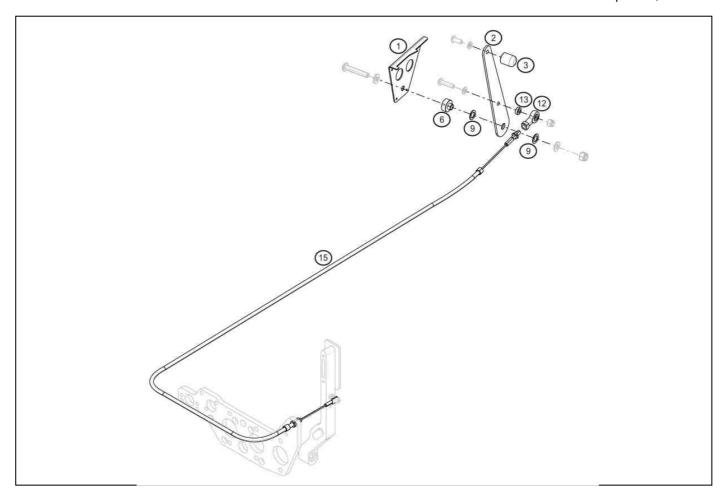






38.50

April 4th, 2011



	A	В	C
1	X		
2		X	
3	X		
6	X		
9	X		
12	X		
13	X		
15		X	

2B: Emergency neutral lever

In case of use of a clutch master cylinder ref. 77 11 166 482 or 77 11 161 950, it is mandatory to modify the lever as detailed in chapter B of the 2011 User Manual.

15B : Emergency neutral cable

It is allowed to add a pull-back spring (ref. 77 11 159 704) between the pedalbox plate and the clutch pedal as detailed in chapter B of the 2011 User Manual.





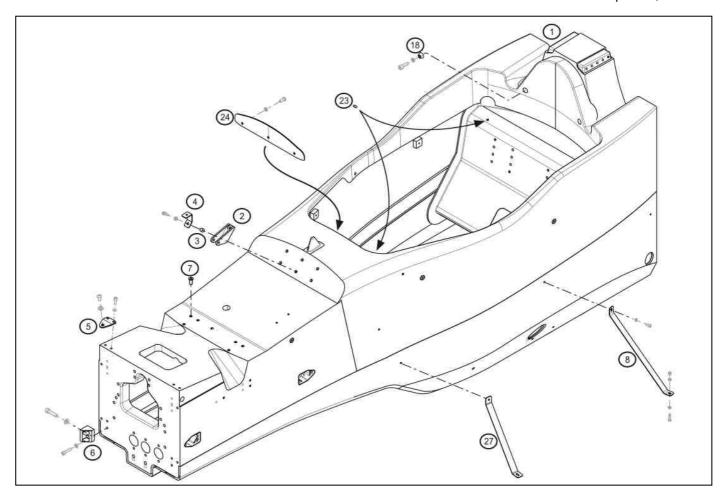






40.00

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3	X		
4	Х		
5		Х	
6		Х	
7	X		
8		X	
18	X		
23			X
24		X	
27		X	

1B: Chassis

Any repair to the chassis must be accompanied by a written declaration by the entrant to the Renault Sport Technical scrutineers. It must also be mentioned in the vehicle's technical passport. Important repair will have to be exclusively carried out by the chassis manufacturer. It is allowed to stick a thermal protection of adhesive metallic tape on the back face of the tub, in front of the engine.

5B: Upper crashbox bracket

It is allowed to enlarge the hole to improve crashbox fitting.

6B: Lower crashbox bracket

It is allowed to repair the threaded hole of this bracket.

8B - 27B : Floor stay

It is allowed to add washers between the stay and the floor and to enlarge holes to respect the mandatory position of the floor.

24B: Wind screen

It is allowed to fit a wind screen. Only the Renault Sport wind screen ref. 77 11 166 570 is allowed.





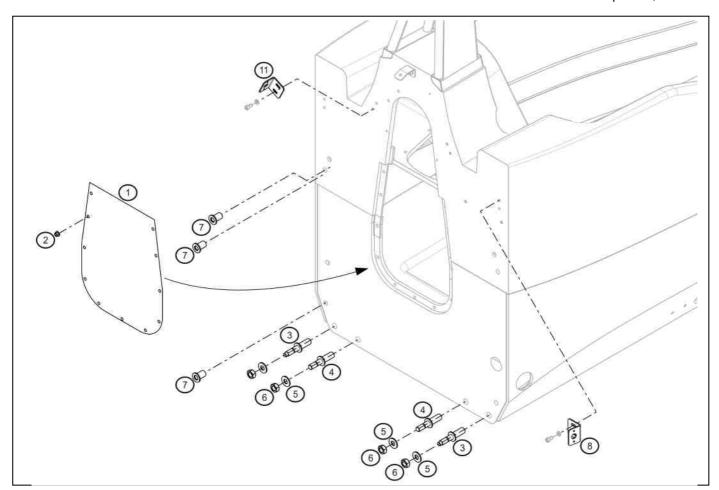






40.10

April 4th, 2011



	Α	В	С
1	Х		
3	Х		
4	Х		
5			Х
6			Х
7	Х		
8		Х	
11		X	

8B - 11B : Engine cover bracket

It is allowed to modify all the engine cover brackets in order to replace the original fasteners by a system of screw and captive nut.





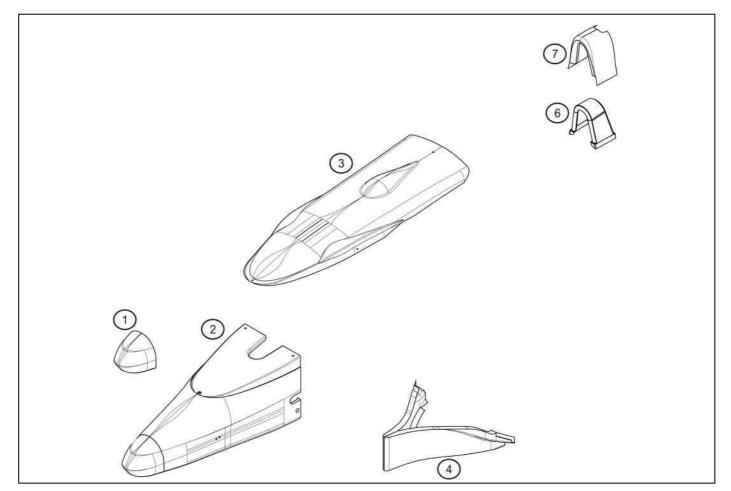






40.50

April 4th, 2011



	Α	В	С
1		Х	
2		X	
3		Х	
4		Х	
6	Х		
7		Х	

1B: Crashbox tip

It is forbidden to repair the crashbox tip. It can be replaced following the procedure that can be found in the 2011 User Manual.

2B: Nose or crashbox

Any repair to the crashbox must be accompanied by a written declaration by the entrant to the Renault Sport Technical scrutineers. It must also be mentioned in the vehicle's technical passport. Important repair will have to be exclusively carried out by the chassis manufacturer.

3B- 7B - 4B

It is allowed to repair without any change of weight or dimension.

3B: Front cover

It is allowed:

- To add adhesive tape on the camlocs. This tape must only secure the cover fitting and cannot bind two elements together.
- -To drill holes in the cover for the radio antenna and/or the pitot tube. In case of use of a Pitot sensor during qualifying and race, only the Renault Sport ref. 7711 166 400 is allowed.





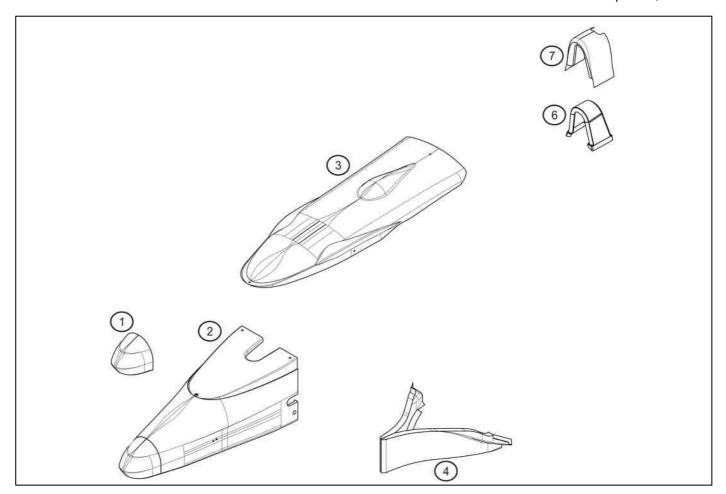






40.50

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
4		Х	
6	Х		
7		Х	

-4B : Front bib

It is allowed to adjust the position of the front bib relative to the chassis.

7B: Roll hoop fairing

It is allowed to drill up to 2 holes in the fairing to fit a video camera.

The maximum hole diameter is 15 mm. The holes must be covered when there is no video camera fitted on.





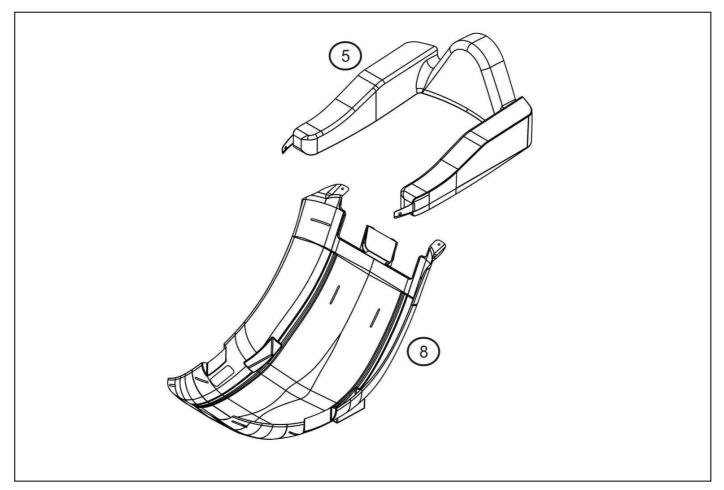






40.51

April 4th, 2011



	Α	В	С
5		Х	
8		Х	

5B: Head rest

The installation of a sealing gasket between the head rest and the body is permitted.

The installation of additional protection and on the head rest is permitted.

It must be fixed obligatorily with a « Velcro-type» fixation, so that it can be removed rapidly and easily.

It is allowed to paint it.

It is allowed to install a fire-proof cover.

8B: Extractable seat shell and seat

It is permitted to add a seat.

The loops of the belts used to extract the seat from the car must be positioned so as to facilitate the eventual intervention of the first aid personnel.

It is allowed to trim the front section of the extractable seat in order to avoid contact with the carbon bulkhead.

It is allowed to repair the extractable seat shell without any change of weight or dimension.

It is allowed to fix a washer or a spacer on the carbon seat in order to improve its support with the chassis pins. This modification must not affect the extraction in case of emergency.

It is allowed to add a seat in accordance with the 2011 User Manual (chapter B). The maximum weight of this seat is seven (7) Kilograms





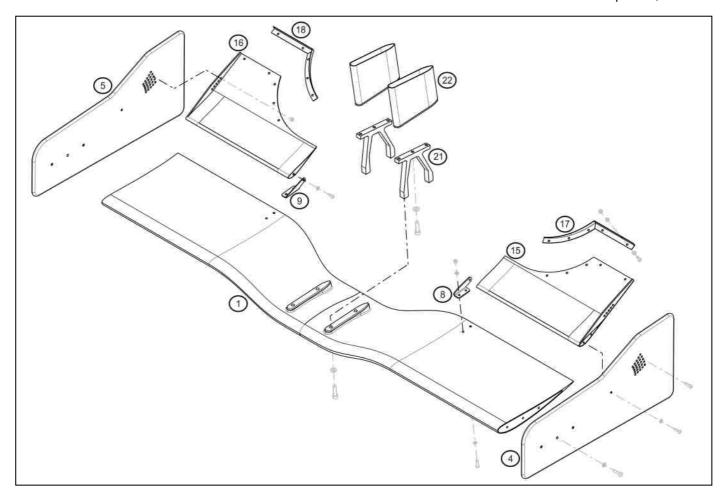






41.00

April 4th, 2011



	Α	В	С
1		Х	
4		X	
5		X	
8	Х		
9	Х		
15		Х	
16		X	
17	Х		
18	Х		
21	Х		
22		Х	

1B- 4B- 5B- 15B- 16B- 22B : Front wing elements

It is allowed to repair without any change in weight or dimension..

It is permitted to apply adhesive tape on the leading and trailing edges. In all cases, its only function shall be to protect the item to which it has been applied. Under no circumstances shall it be used to connect several items.

1B : Front wing

It is permitted to block up the fitting holes.

4B – 5B : Front wing side plates

It is allowed to make counter sink on the front wing side plate fitting holes except on the flap setting holes.





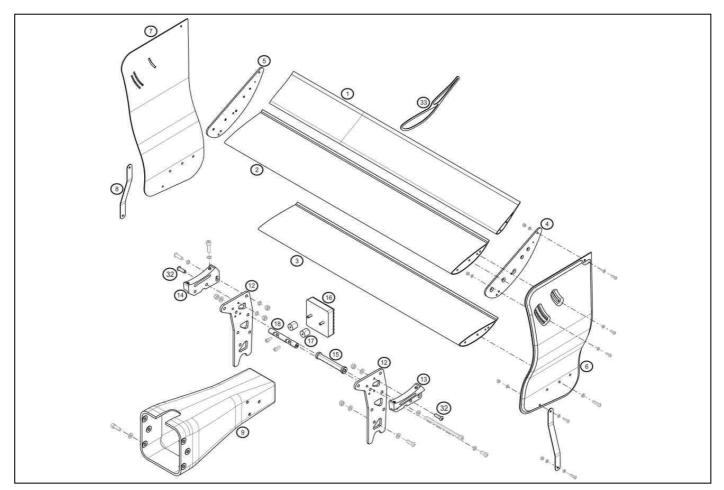






41.50

April 4th, 2011



	Α	В	С
1		Х	
2		X	
3		X	
4	X		
5	X		
6		Х	
7		Х	
8		X	
9		Х	
12	Х		
13	Х		
14	X		
15	Х		

	Α	В	С
16		X	
17	X		
18	Х		
32	X		
33	Х		

1B-2B-3B-6B-7B: Rear wing elements

It is allowed to repair without any change in weight or dimension..

It is permitted to apply adhesive tape on the leading and trailing edges. In all cases, its only function shall be to protect the item to which it has been applied. Under no circumstances shall it be used to connect several items.

8B : Floor stay

It is allowed to enlarge the holes in order to respect the mandatory position of the diffUser as described in the 2011 User Manual.

9B : Rear crashbox

Any repair to the crashbox must be accompanied by a written declaration by the entrant to the Renault Sport Technical scrutineers. It must also be mentioned in the vehicle's technical passport. Important repair will have to be exclusively carried out by the chassis manufacturer.

16B: Rain light

The rain light can be used with a maximum of twenty (20) leds not functioning.





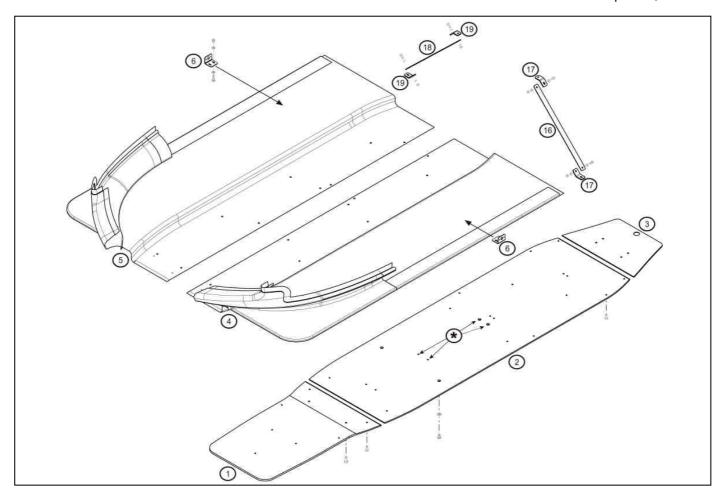






42.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
4		Х	
5		X	
6	X		
16	X		
17		X	
18	X		
19	·	X	

1B : Front wood

It is permitted to apply adhesive tape on the leading edges. In all cases, its only function shall be to protect the item to which it has been applied. Under no circumstances shall it be used to connect several items.

It can be painted

2B - 3B : Intermediate and rear wood

They can be painted

2B: Intermediate wood

The minimum thickness is 3 mm.

The thickness measurment will be madearound the 4 holes situated close to the longitudinal axle of the wood (marked with a *).

It is allowed to drill the wood in order to be able to unmount the battery rack and the rear extinguisher support without removing the wood.

4B - 5B : Floors

It is allowed to repair with no change in weight and dimension.

It is allowed to drill the floors in order to be able to unmount the battery rack and the rear extinguisher support without removing the wood.

Floors can be fitted with captive nuts.

17B - 19B : Floor stays

It is allowed to add washers between the stay and the floor and to enlarge holes to respect the mandatory position of the floor, as described in the 2011 User Manual.



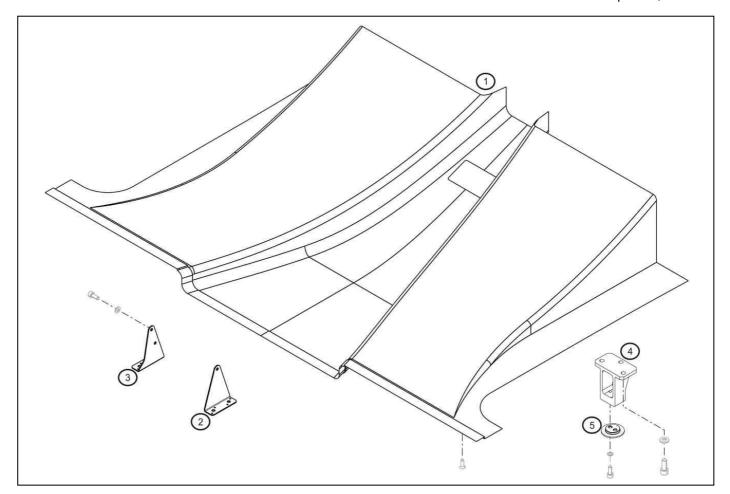






42.10

April 4th, 2011



	Α	В	С
1		Х	
2	X		
3	X		
4	X		
5		X	

1B : Diffuser

Its position is ruled. The values and the method are detailed in the 2011 User Manual.

It is allowed to repair without change in weight and dimension.

It is allowed to make countersinks on the floor skid in order to use CSK screws to fit it to the car.





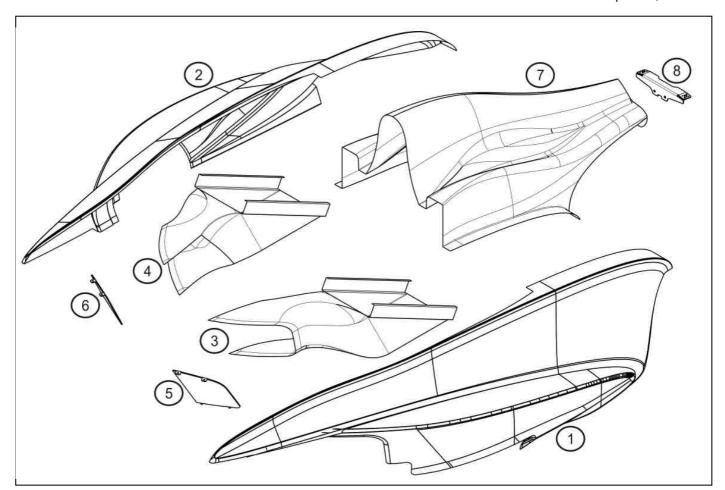






43.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
4		Х	
5		Х	
6		Х	
7		X	
8	X		

1B - 2B - 3B - 4B - 7B : Bodywork

It is allowed to repair without change of weight or dimension.

1B-2B-7B: Sidepods and engine cover

It is allowed too add adhesive tape on the camlocs and zeus. This tape must only secure the fitting and cannot bind two elements together..

The genuine fitting system can be replaced by a system of screw and captive nuts.

1B-2B: Sidepods

it is allowed to add a protective and sealing gasket between the sidepods and the chassis.

It is allowed to add an adhesive heat protection under the right hand sidepod (2).

It is allowed to trim the upper part of the left hand sidepod to avoid any potential contact with the "Staübli" connector of the engine.

It is allowed to trim the left hand sidepod in order to fit the transponder following the procedure described in the 2011 User Manual (chapter E).

3B-4B: Radiator ducts

It is allowed to add gaskets or adhesive tape between the ducts and the chassis to improve sealing.

5B - 6B : Radiator nets

A screen or tape can be placed on the nets to regulate engine temperature. It is allowed to link the radiator nets and the ducts with tape.





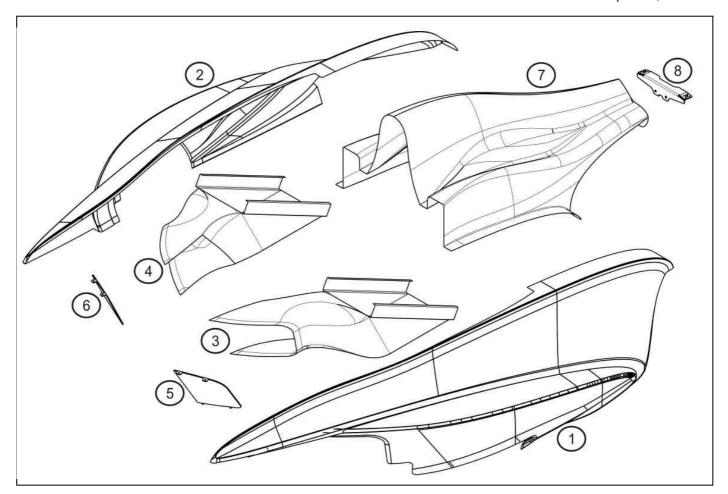






43.00

April 4th, 2011



	Α	В	С
1		Х	
2		Х	
3		Х	
4		Х	
5		Х	
6		Х	
7		X	
8	X		

7B : Engine cover

It is allowed to remove the ears at the back of the engine cover.





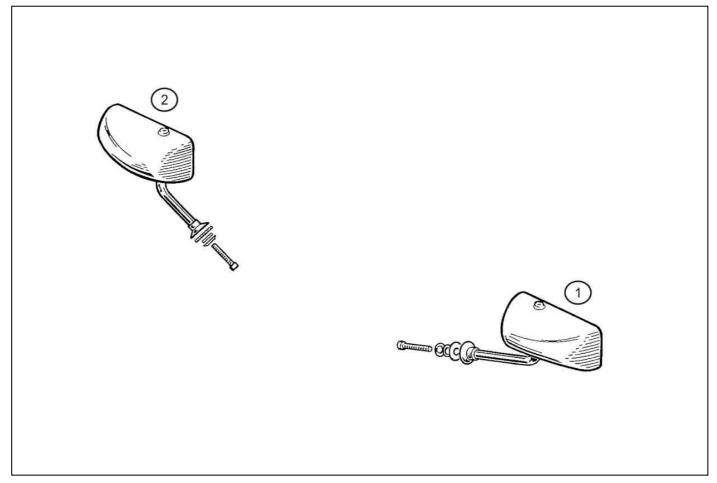






56.20

April 4th, 2011



	Α	В	С
1		X	
2		Х	

1B - 2B : Rear view mirrors

It is allowed to:

- modify the rod length
- mount :
 - Convex mirrors ref: 7711165386 & 7711165387
 - flat mirrors ref: 7711159254 & 7711159255

They must be painted following the 2011 official identification plans.





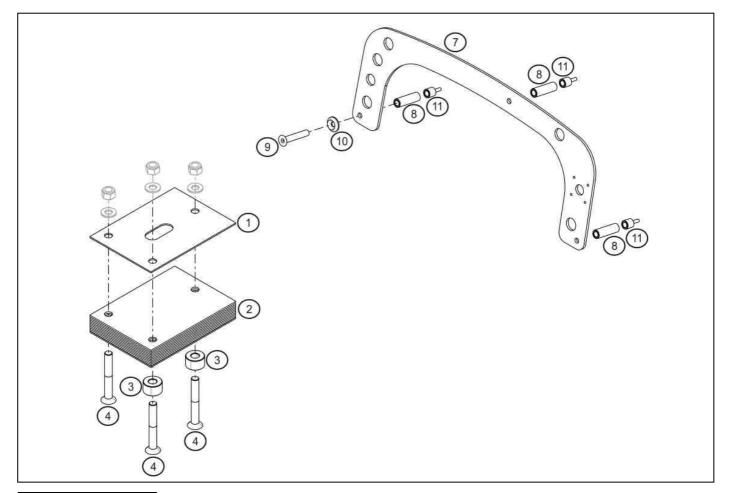






57.00

April 4th, 2011



	Α	В	С
1		Х	
2		X	
3		X	
4		X	
7	Х		
8	Х		
9			X
10			Х
11	X		·

1B : Ballast support

It is mandatory to mount one support below and one support above the ballast.

2B: Ballast

2 types of ballast are allowed

- 0.250kg ref. 77 11 166 590
- 1kg ref. 77 11 166 589

The number of ballast is free in order to respect the articles 4.1 & 4.2 of the 2011 Formula Renault 2.0 Technical regulations.

To improve the fitting of the ballast, it is allowed to put spacers or nuts between the ballast and the chassis.

3B: Spacer

The original spacers can be modified or removed.

4B : Ballast screws

To respect the article 4.3 of the 2011 Formula Renault 2.0 Technical regulations, the screws should permit to add a seal if the Renault Sport technical scrutineers judge it necessary.





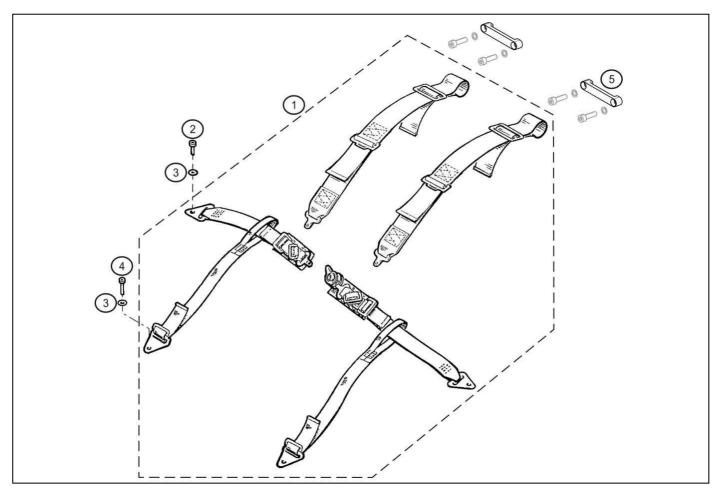






59.20

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3	Х		
4	Х		
5	Х		

1B : Safety belts

It is allowed to add protections on the belts.

In case of violent crash, the safety belts are slack and loose the ability to absorb energy in case of another crash. Therefore, after any violent crash the safety belts must compulsorily be replaced.

The homologation label can be removed by a RENAULT Sport technical scrutineer.





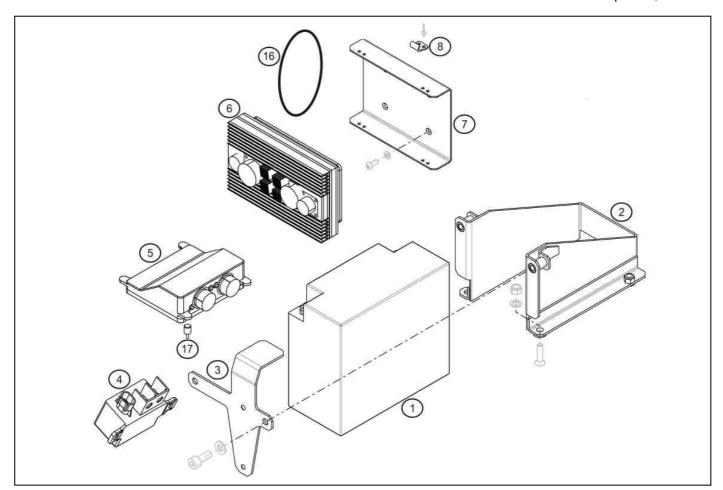






80.00

April 4th, 2011



	Α	В	С
1	Х		
2		X	
3	Х		
4	Х		
5	Х		
6	Х		
7	Х		
8	Х		
16			Х
17	X		

2B : Battery rack

It is allowed to repair and to reinforce the battery rack.





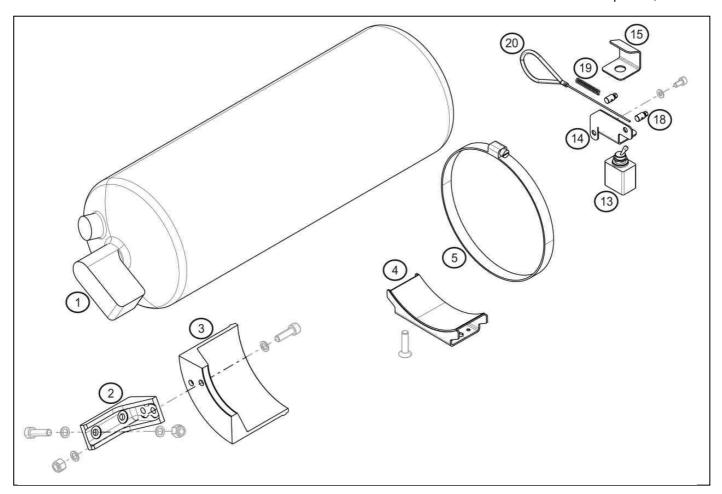






90.00

April 4th, 2011



	Α	В	С
1		Х	
2	Х		
3	X		
4	Х		
5			X
13	X		
14	X		
15	X		
18	X		
19	Х		
20	X		

<u>1B : Extinguisher</u>
The extinguisher must always remained armed to respect the 2011 Formula Renault technical regulations.







