

REFERENCE	BT_2010_FR20_08_UK
DATE	2010 April 8th
SUBJECT	Several mandatory updates
PART	Steering arm, front rocker, GB actuator, extractable seat, crankshaft loom, radiator net, ECU

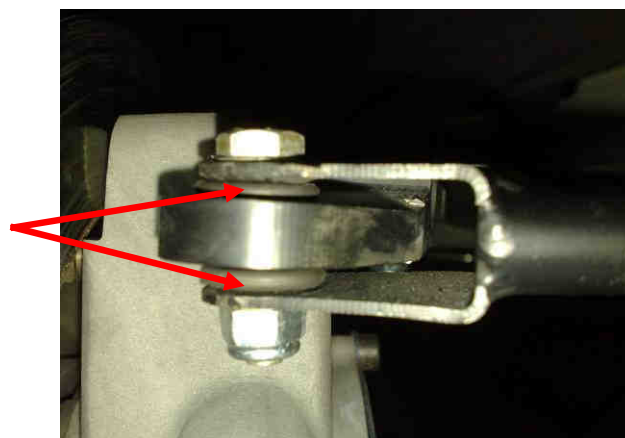
### 1. New steering arms

The new steering arms are now available from your Renault Sport spare parts dealer:



*The clevis is thicker and wider*

The clevis of the steering arms has been reinforced. New seals are now also available to avoid any contact against the Ackerman support. These new parts are now the only ones allowed.



*New seals ø 12x3mm*

You must return the old steering arms to Renault Sport.

## 2. New front rocker

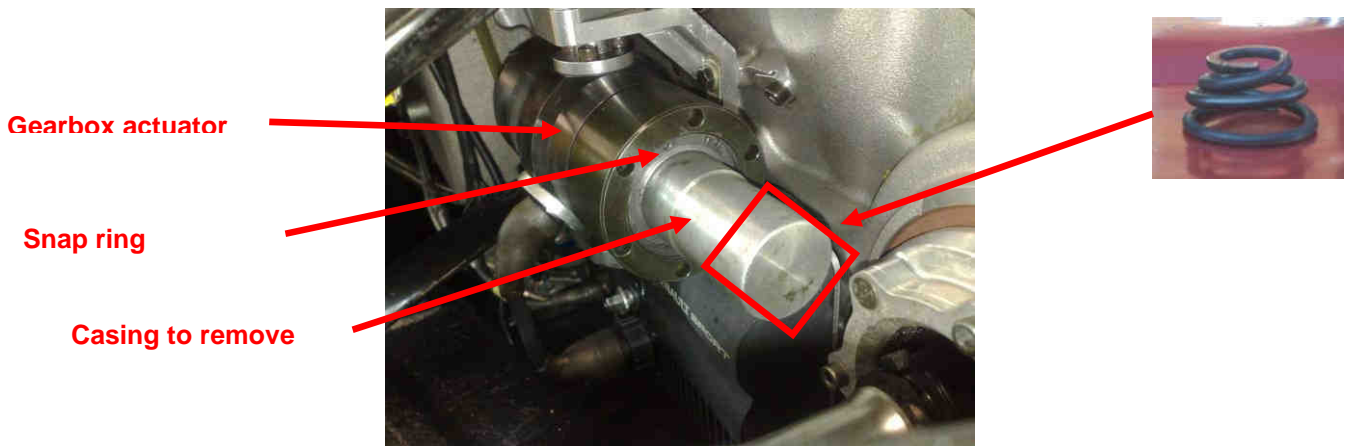
The new front rockers are now available from your Renault Sport spare parts dealer. The parts are already assembled with a new and stronger rocker axle. The reliability of both parts has been improved: stronger material and improved shape



These parts are now the only ones allowed. You must return the old rockers to Renault Sport.

## 3. Spring in the gearbox actuator

It is now mandatory to remove the spring which is at the back of the actuator. To remove it, unmount the bottom casing of the actuator (1 snap ring), and remove the spring which is **INSIDE** the casing.



This part is not needed anymore and could create troubles.

**Note:** do not remove the second spring which is fitted directly on the actuator.

## 4. Protection of the crankshaft loom

Following the improvements made on the crankshaft loom, the protective shrink is not needed anymore.

A new and stronger protective shrink will be provided by Renault Sport, only to protect the crankshaft connector, in case of a broken catalytic converter that may burn the connector.



5. New ECU mapping

Several modifications have been applied to the ECU mapping:

- **Pit limiter activation**

To engage the pit limiter, the driver has to push and stay on the pit limiter button 1s.

To disengage the pit limiter, the driver has to push and stay on the pit limiter button 1s.

**Note:** the pit limiter may be activated only if the car is below 130 km/h. (100 km/h in the original mapping)

- **Oil pressure security**

An oil pressure security has been added to the car in case of an accessory belt breakage. In this case, the engine will switch off automatically after 1s.

If this security occurs, the ECU power must be recycled and one must wait 5s. before restarting the engine.

- **Upshift improvements**

A major improvement has been made on the upshifts from 4<sup>th</sup> to 5<sup>th</sup>, 5<sup>th</sup> to 6<sup>th</sup> and 6<sup>th</sup> to 7<sup>th</sup>. The upshifts are now quicker and always the same. No drops on the wheel speed anymore.

- **IDLE improvements**

The IDLE is now better when the car is going back to the pit. The rpm target @ IDLE has been raised when the car is cold. The IDLE is also more regular.

- **Water temp alarm on screen when car is in the box**

When the car is hot, and the engine powered off, the water temperature alarm may occurs on the dashboard. This alarm is now removed when the engine is stopped. For example, this will permit you to adjust the brake bias in the box

The new mapping is represented by a new sticker on the ECU and is now the only one allowed:



The mapping will be updated for your first race meeting.

**Note: the barrel potentiometer setup has to be modified to use correctly the new mapping.** It is really important to set it accurately because all the gearshift system depends directly on this sensor. The easy way to set it is to put the car in 3<sup>rd</sup> gear, and to set the barrel potentiometer value to 2.50V.

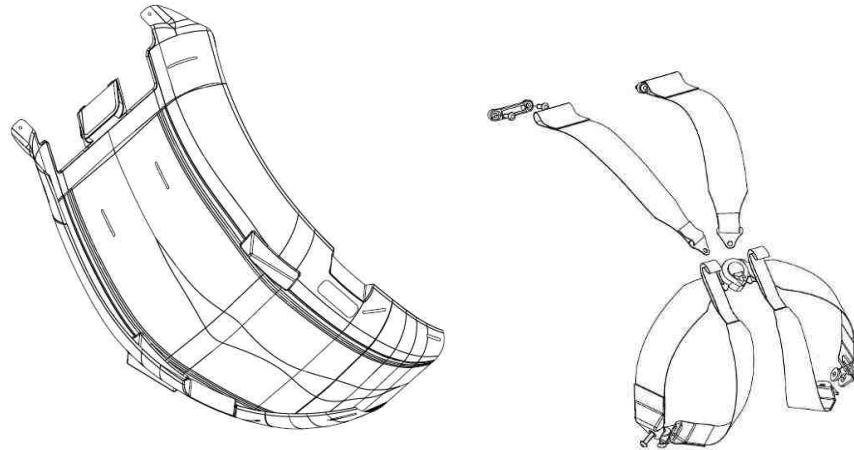
The barrel voltage values have been rectified in the new mapping, and please find hereafter the correct new values:

Gear	Reverse	Neutral	1st	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
<b>Reading (V)</b>	0.386	0.915	1.440	1.965	<b>2.500</b>	3.040	3.565	4.090	4.625



### 6. Fitting of the extractable seat

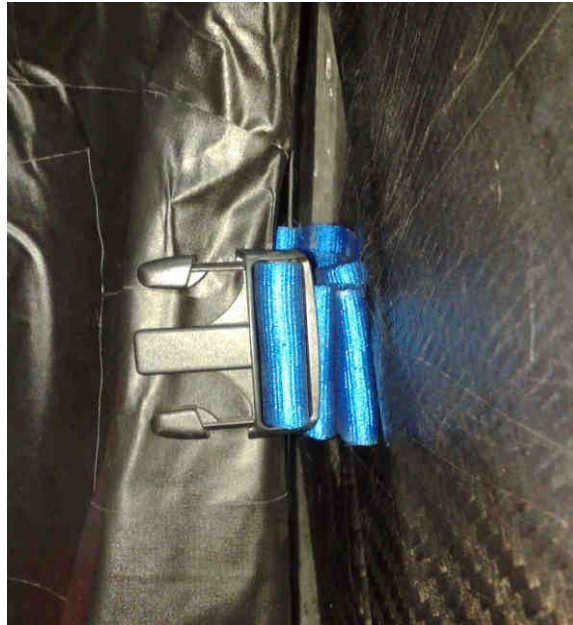
You must keep in mind that, in case of important crash, the driver should be extracted with no harm and no difficulties. On this purpose you should be sure that the following points are respected when you make your driver's seat.



- Make sure that the seat is correctly fitted in the carbon shell
- Make sure that the holes for the leg straps in the carbon shell and in the seat are in front of each others.
- Make sure that the leg straps are exiting in front of the driver's crotch
- Make sure that, the driver does not sit on the leg straps when he is sitting in the car
- **The driver seat must not exceed the carbon shell length and width.**
- **Make sure that the straps are always visible and easily usable when the driver is in the car, as shown below:**

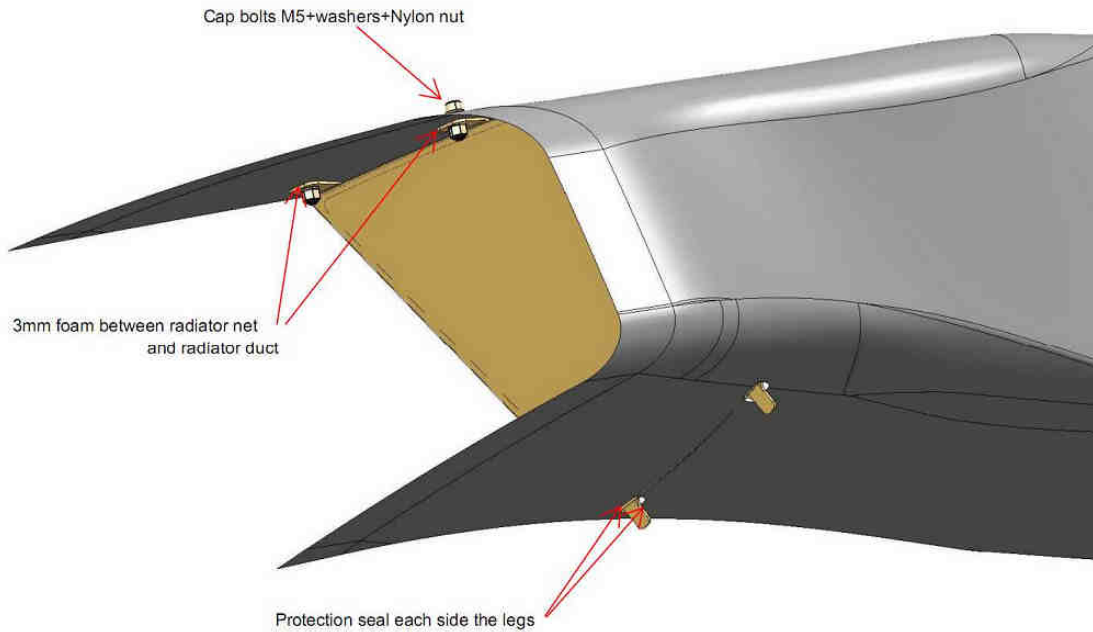


- Make sure that the middle blue and red straps can be easily extended: (ie make loops and fit them using bodywork tape to the extractable seat)



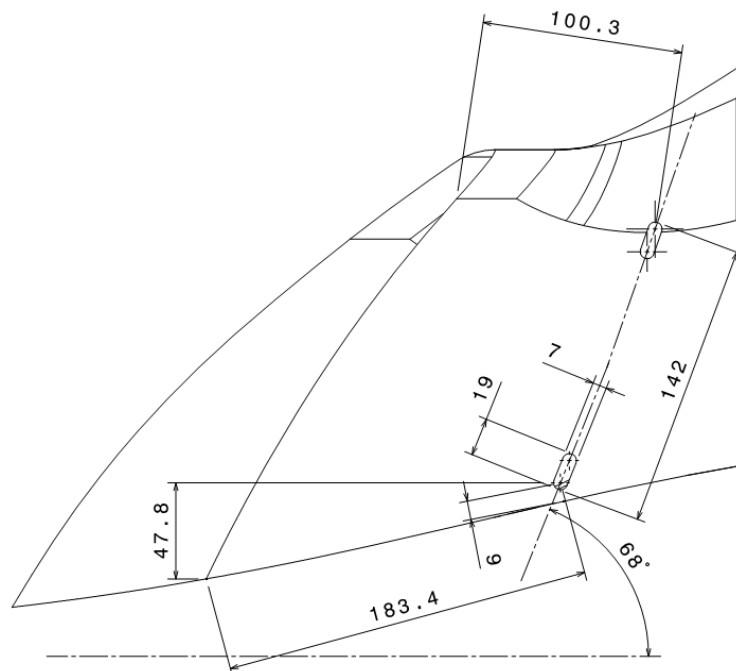
### 7. Fitting of the radiator nets

The original radiator nets are now available from your Renault Sport spare parts dealer:

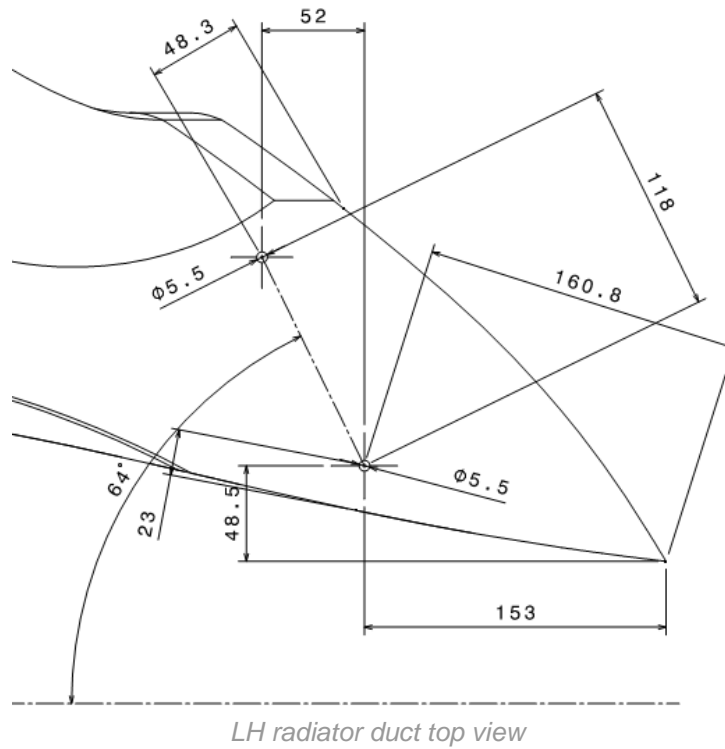


*Left-hand side radiator net*

To fit the nets, you will have to respect the following quotations. These quotations are only given to help you fitting them, but must be respected as much as possible:



*LH radiator duct bottom view*



These new parts are now the only nets allowed.

**Note:** we remind you that the only way to regulate the engine water temperature is to put tape or a screen on these radiator nets. It is strictly forbidden to put tape between the sidepod and the floor.