

REFERENCE	BT_2013_X98CUP_08_UK
DATE	2013 July 3rd
SUBJECT	Evolutions for the Eurocup Clio Red Bull Ring meeting (1/2)

CONCERNED : 2013 EUROCUP CLIO

Dear Competitors,

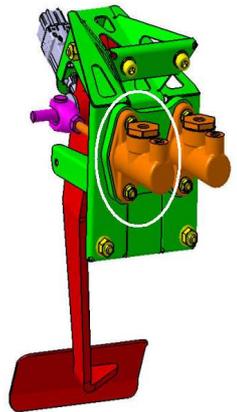
Please find below some mandatory updates for the Eurocup Red Bull Ring Meeting

1) Rear brake master cylinder

We inform you that the new master cylinder Ø15.9mm (0.625" = 5/8) is **mandatory** from now.

This Master cylinder will be available under the reference 8201467455

All teams have received in Spa this new master cylinder under the reference 77 11 166 482 but for those who didn't fit it yet, we remind you that the following instructions must be respected:



INSTRUCTIONS TO FIT THE NEW MASTER CYLINDER REFERENCE 77 11 166 482

It is mandatory to change the threaded push rod : you must keep the one of your current Ø20.6 master cylinder to make it compatible with the balance bar ball joint.

- ⚠ Only the threaded push rod has to be changed,
→ the spacer behind the snap ring is matched with the master cylinder and mustn't be changed**

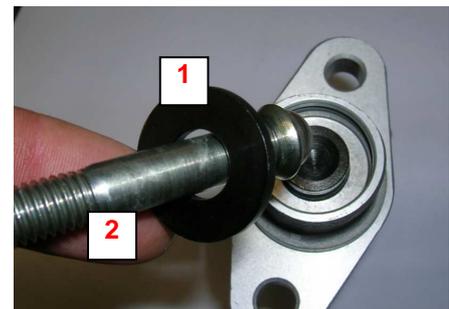
On the current master cylinder (Ø20.6) :

- 1) Remove the boot and the snap ring using an adapted plier



- 2) Remove the push rod ball joint spacer (1) and the threaded rod (2)

CAUTION : The spacer is matched with the master cylinder
These 2 parts mustn't be separated



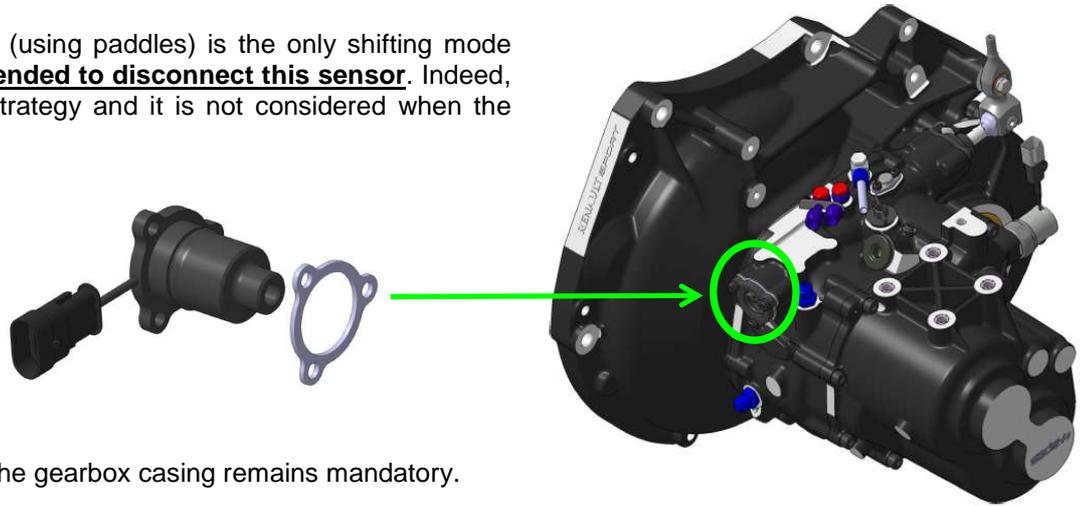
- 3) Repeat these 2 operations on the new master cylinder (Ø15.9), keeping matched the master cylinder and its spacer
- 4) Fit the threaded push rod extracted from the old master cylinder (2) on the new master cylinder (Ø15.9), still keeping the Ø15.9 master cylinder spacer
- 5) Fit the snap ring and the boot

⚠ CAUTION : Refer to Technical Bulletin n° 5 and 7 to set the balance bar under braking / at rest position.

NOTE : The 2 references 8201467455 and 77 11 166 482 are allowed

2) Upshift magnetic sensor

As the semi-automatic strategy (using paddles) is the only shifting mode allowed, it is **strongly recommended to disconnect this sensor**. Indeed, it is only used in the manual strategy and it is not considered when the paddles are pulled.



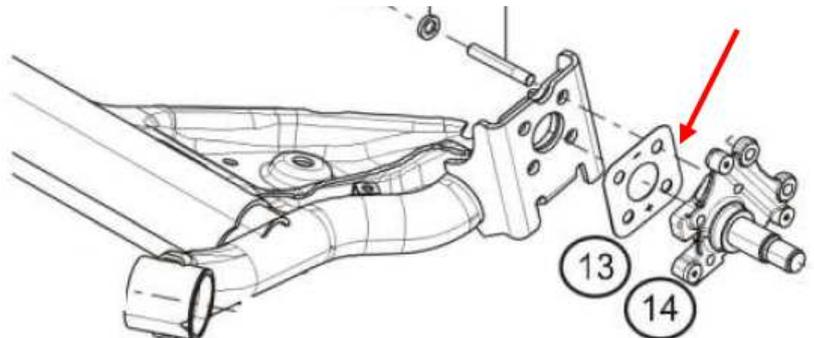
The presence of the sensor on the gearbox casing remains mandatory.

Once disconnected, the female and male sides of the connector (sensor side and engine loom side) must be correctly insulated.

3) Rear camber regulations

The rear camber was regulated in Imola and Spa for technical reasons (level of stock and wrong engraving of the shims).

The rear camber is now **free** respecting the following instructions:



- The 1° and multiples of 1° can only be obtained by combinations of 1° shims. No other combinations using lower angle shim are allowed.

- To reach values < 1°, you must respect the table below:

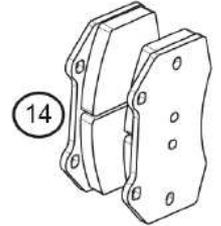
Camber required	Combinations allowed (per wheel)	Combinations forbidden (per wheel)
10'	1x10'	
20'	1x20'	2x10'
30'	1x30'	(3 x 10') or (1x20' + 1x10')
40'	(1x30' + 1x10') or (2 x 20')	4 x 10'
50'	1x30' + 1x20'	(5 x 10') or (1x20' + 3x10') or (2x20' + 1x10')

- In case of technical scrutineering, **only the real physical angle measured using a Vernier calliper will be considered** in accordance with the Technical Bulletin n°5.

CAUTION : The non respect of all these rules will be considered as a technical non conformity.

4) Front brake pads

Regarding the results obtained in Spa, we inform you that the following brake pads references will be the **only ones allowed** on the front axle:



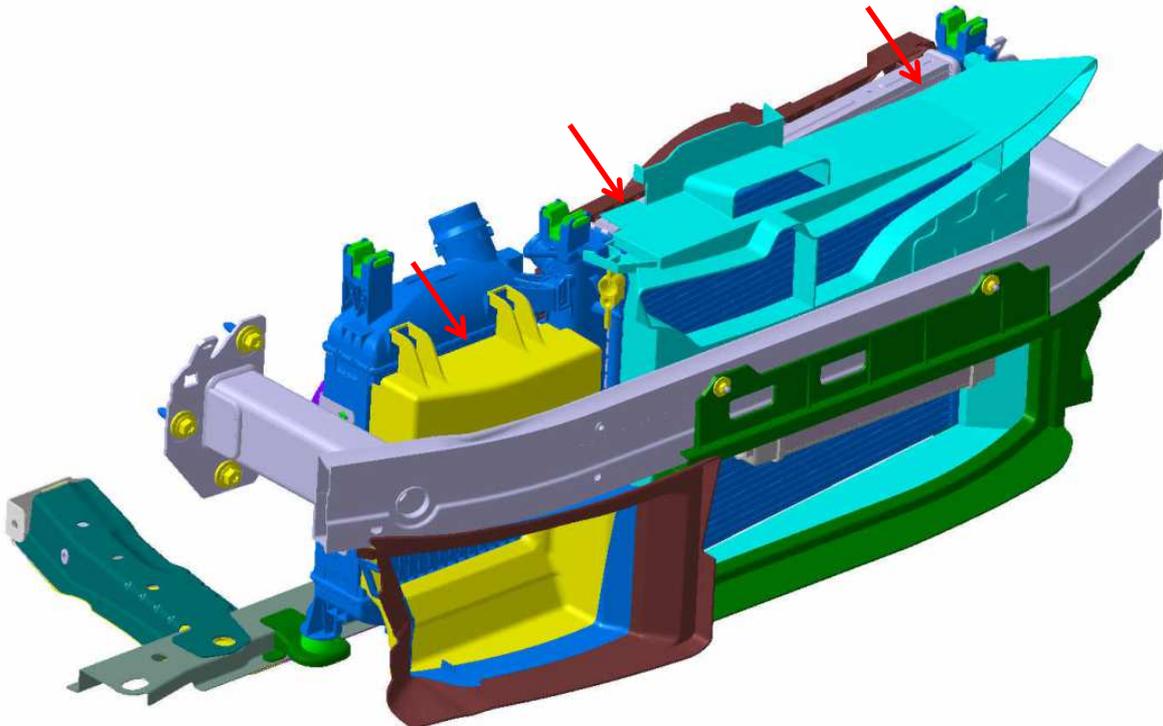
Supplier	Supplier designation	Renault Sport Reference
CL BRAKES	RC6 (RLT03)	77 11 162 955
	RC6ER	82 01 442 791
GALFER	169380/RX (Clio cup 2013)	82 01 471 240
PFC	7871.01	82 01 471 242
	7871.08	82 01 471 243

All these pads will have to be bought directly to the Renault Spare parts truck: “Renault Sport” engraving is **mandatory** contrarily to what was allowed in Spa.

NOTE : Non engraved brake pads will be tolerated for the Red Bull Ring meeting only

5) Cooler sealing

To improve the cooling efficiency, it is now allowed to stick Aluminium tape around front air ducts to join them with the corresponding coolers (turbo air exchanger and engine water cooler). The purpose must be to improve the air flow to the coolers only.



NOTE : We strongly recommend you to use demineralised water + anti corrosion additive as engine coolant. Bottles of **Water wetter** (335mL) are available to the spare parts department under the reference 82 01 415 645.

6) Water cooler support

To reinforce the water cooler fasteners and avoid breaking the 2 lower plastic centering pins, a new Aluminium support has been designed:



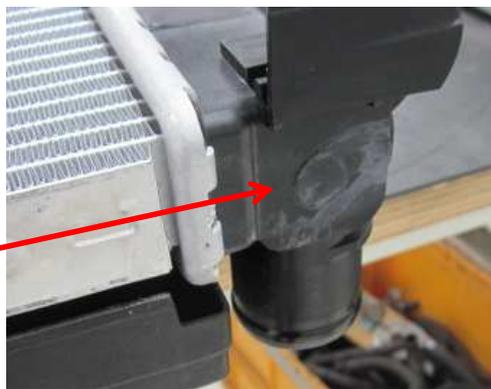
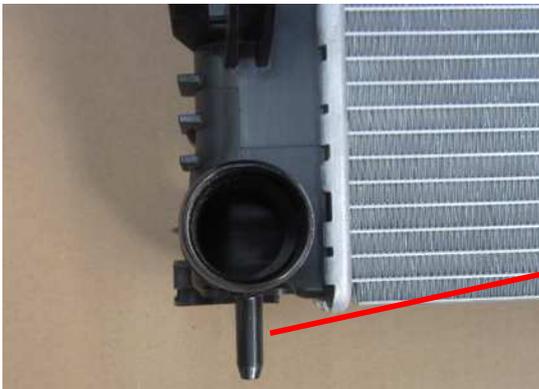
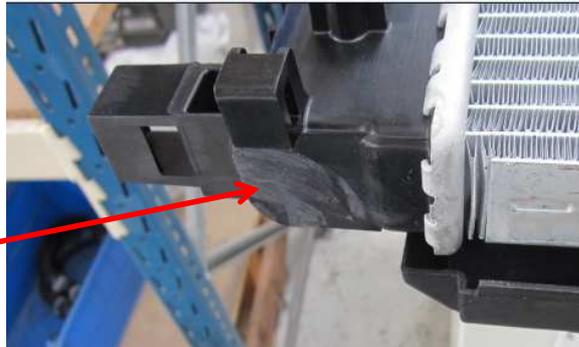
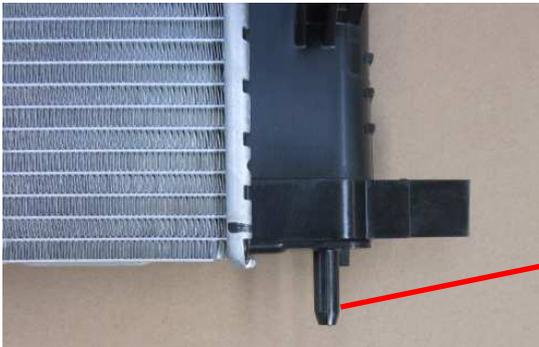
References of the kit:

Aluminium support: 82 01 464 554

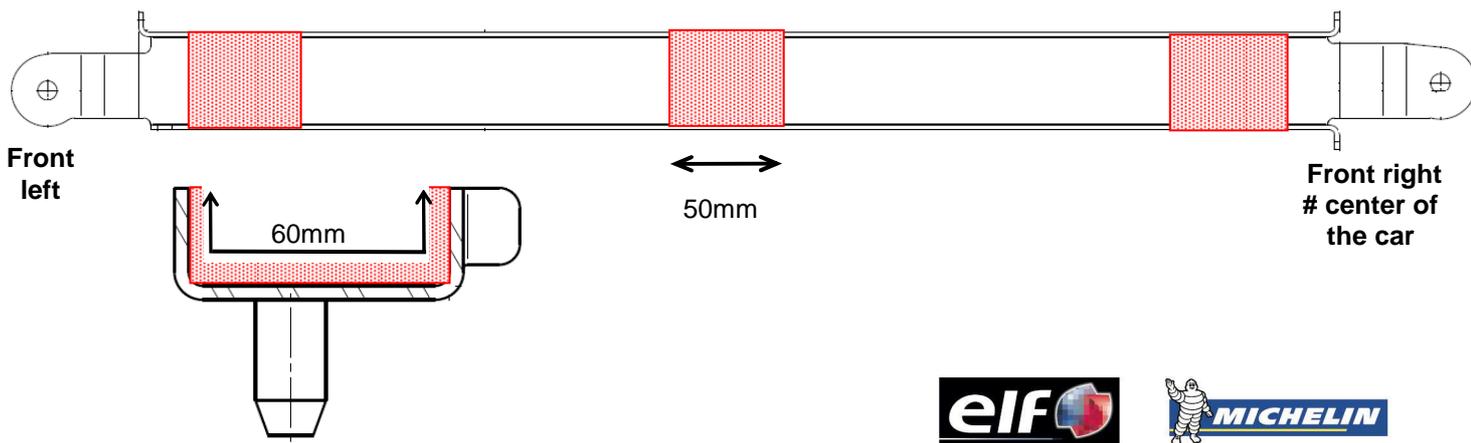
Protective foam (thickness 5mm): 8201474971

To fit this kit correctly, we ask you to respect the following instructions:

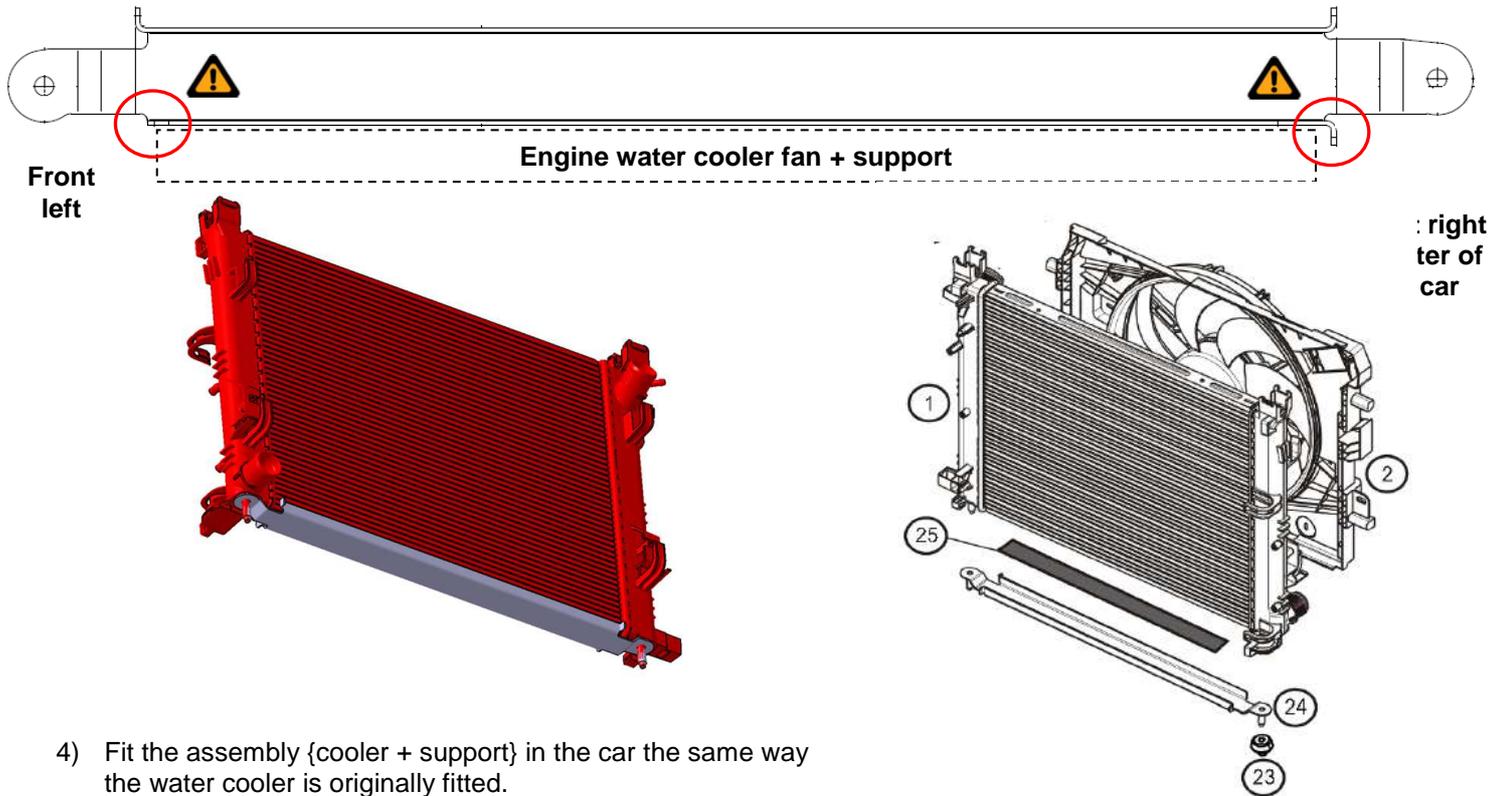
- 1) Cut the 2 centering pins **flush** to the lateral water boxes :



- 2) Stick 3 "U" of protective foam (width 50mm, length 60mm) on the support as indicated (left and right side + middle)



3) Fit the support under the engine water cooler as indicated below :



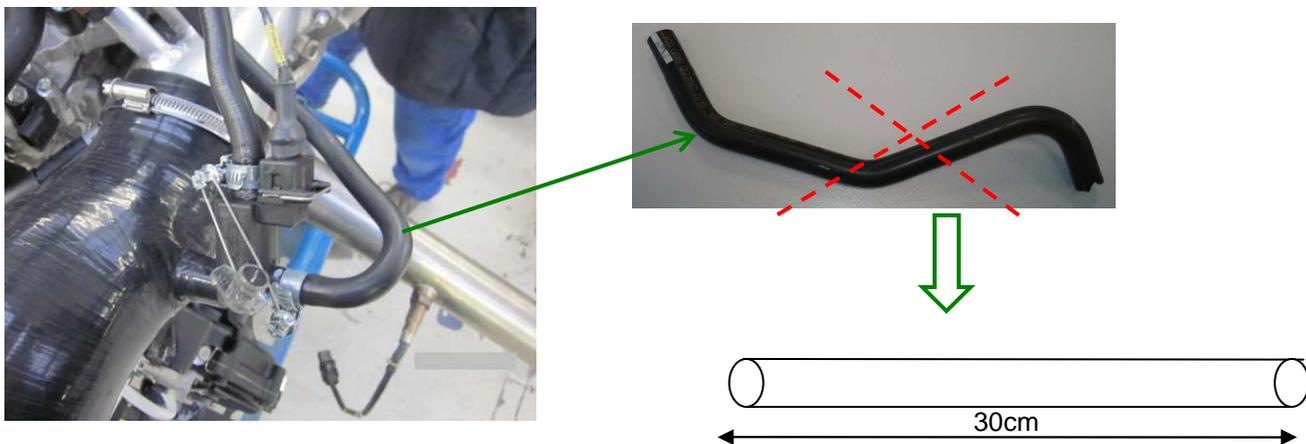
4) Fit the assembly {cooler + support} in the car the same way the water cooler is originally fitted.

NOTE :

- The support and the foam will be directly available free of charge next week to the Renault Sport spare parts department or to the Renault Sport spare parts truck in Red Bull Ring.
- These parts are **mandatory** from the Red Bull Ring meeting

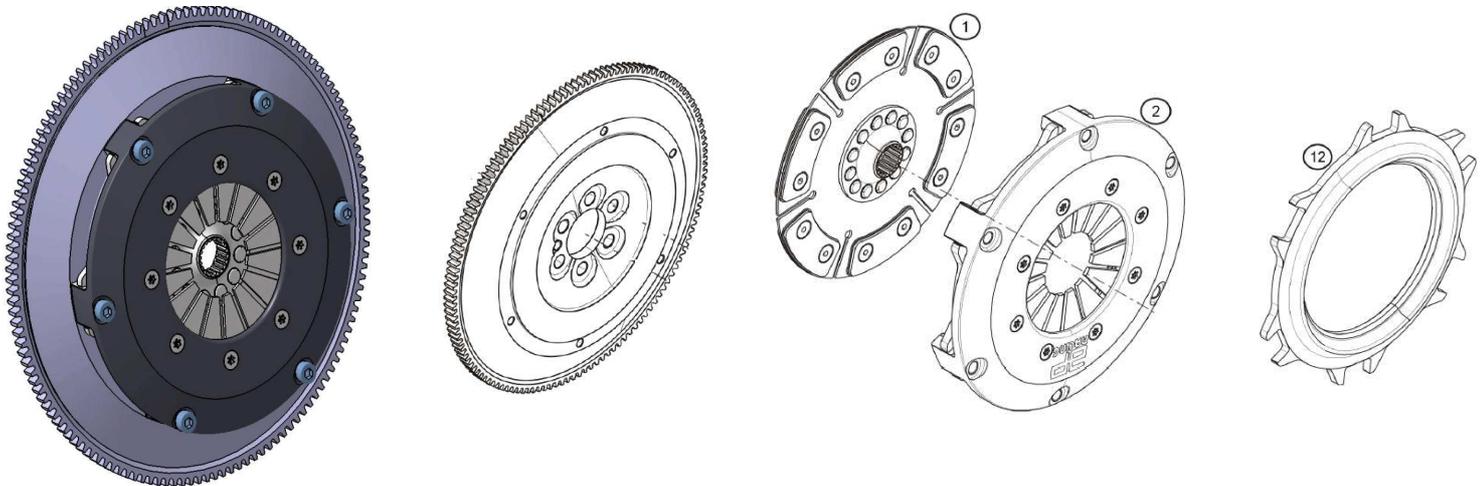
7) Waste gate electro valve supply hose

For reliability reasons, the waste gate electro valve supply hose has been changed during the Eurocup Spa meeting.



The original curved hose has been replaced by a straight and longer one (82 01 474 970). If your engine didn't receive the update in Spa, please contact your ORECA technical interlocutor in Red Bull Ring. This evolution is **mandatory**.

8) Clutch and flywheel



Regarding the premature wear problem experienced in Spa, Renault Sport is working on technical solutions to improve the current situation:

- Engine mapping
- Test of a new racing clutch
- Test of a new performance clutch

The new racing and performance clutches have already been tested with good results but they can't be validated yet regarding the too low mileage done at the moment.

As the new engine mapping is a very good improvement (it brings more progressivity in the Pedal/throttle management), it will be applied on every car from the Red Bull Ring meeting, on Thursday afternoon.

A complete clutch evolution should be applied for the Eurocup Paul Ricard meeting in September.

Waiting for this date, we inform you that the selling prices have been strongly reduced and it is now possible to buy the mechanism pressure plate separately.

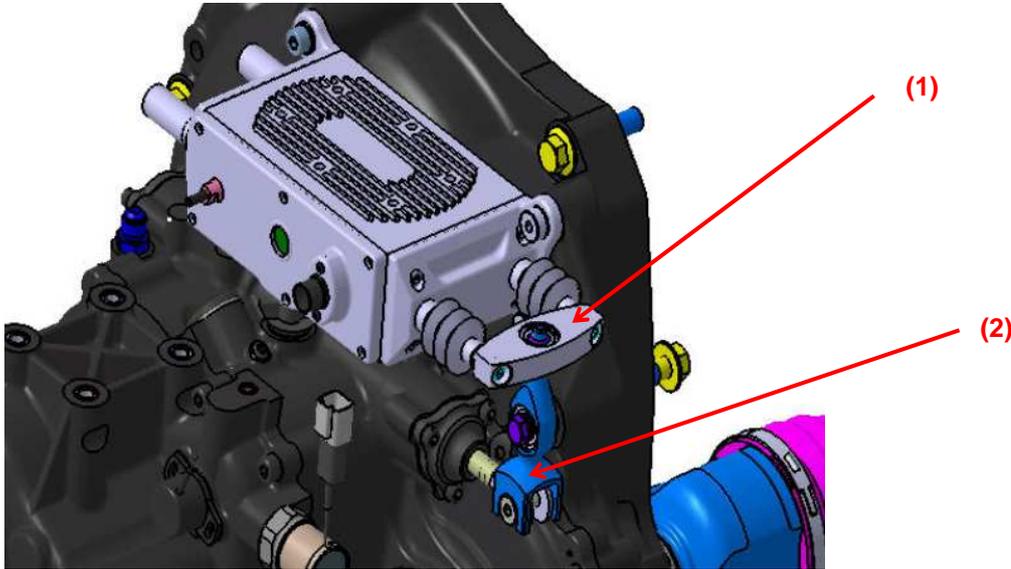
Parts	Current references	Current Prices (excl VTA)	New references	New Prices (excl VTA)
Complete mechanism	7711160633	455,16€	0011160633	300€
Pressure plate	/	/	8201473454	130€
Friction disc	8201370335	178,22€	0001370335	130€
Flywheel	8201350850	541,06€	8001350850	400€

NOTE :

- To buy at the new prices, the parts have to be ordered under the new references
- All parts are available from now to the Renault Sport spare parts dept

9) Gearbox command

As announced in the Information note n° 4 sent on June 10th, we remind you to send the 2 following parts to SADEV for update:



(1): XAP actuator yoke

It is not necessary to send the complete actuator. The yoke has to be removed by unscrewing the 2 screws (CHC M5)

(2): SADEV Rocker

Once the XAP actuator yoke (1) is removed, unscrew the ball joint fastening screw to remove the rocker

CAUTION:

- Do not forget to indicate in the parcel : your team name + chassis number
- All parts must be sent to SADEV to the following address **before next Tuesday (9th)**

SADEV
Teddy BILLAUD / Gaetan GODARD
+33(0)2 51 66 42 68
6 rue Grand'Montains
85110 SAINT-PROUANT
FRANCE

This update is free of charge.

NOTE :

- If the parts can be sent to SADEV, we ask you to keep them but the update will have to be performed before for the Eurocup Paul Ricard meeting.
- Both old and new gearbox command versions are allowed for the Red Bull Ring