

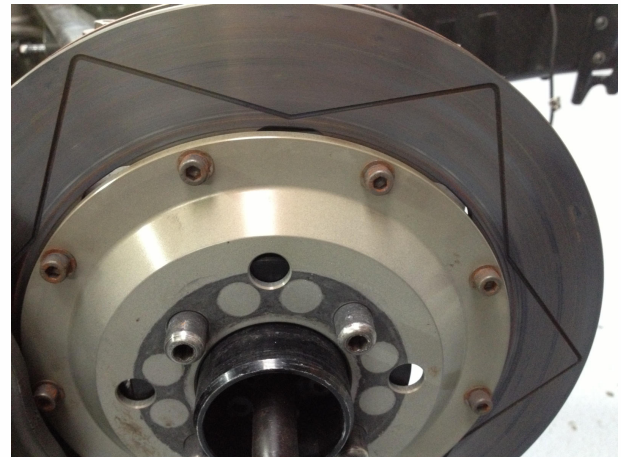
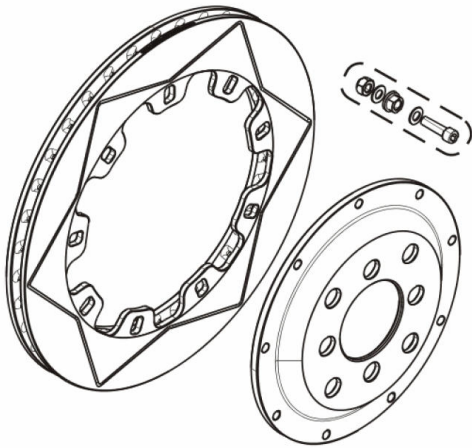
REFERENCE	BT_2013_FR20_4_UK
DATE	9th February, 2013
SUBJECT	2013 improved parts to be delivered
PART	Brake discs, brake pad abutment plates, master cylinder reservoir couplings

1. New brake discs

- Improvements

The modifications aim at improving lifetime of both discs and bells:

- 1 more bobbin mounting (total of 9) + improvement of the disc shape between the mounting holes. That should significantly reduce disc bending.
- Bobbin slots are now in the disc, to eradicate bell wear.
- Addition of grooves on the disc friction faces, in order to clean the friction faces of both discs & pads. That will permit to keep braking efficiency at its highest level for a longer time (problem mainly encountered with Pagid brake pads) and could also lead to a longer pad lifetime.
- Manufacturing tolerances have been reviewed to ensure that the vanes are well centred into the disc.



New 2013 disc assembly

Note: those improvements have no impact on the brake performance of the car.

- Deployment

Renault Sport has now received the first batches of new brake discs, including new bells and new bobbins sets. The sending of the disc to the customers that bought either 2013 cars and/or 2013 kits is automatic.

However, Renault Sport will respect the following order to send the discs:

1. New customers
2. 3 sets (= 3 cars) for Eurocup teams
3. ALPS and NEC teams + completion of the Eurocup teams

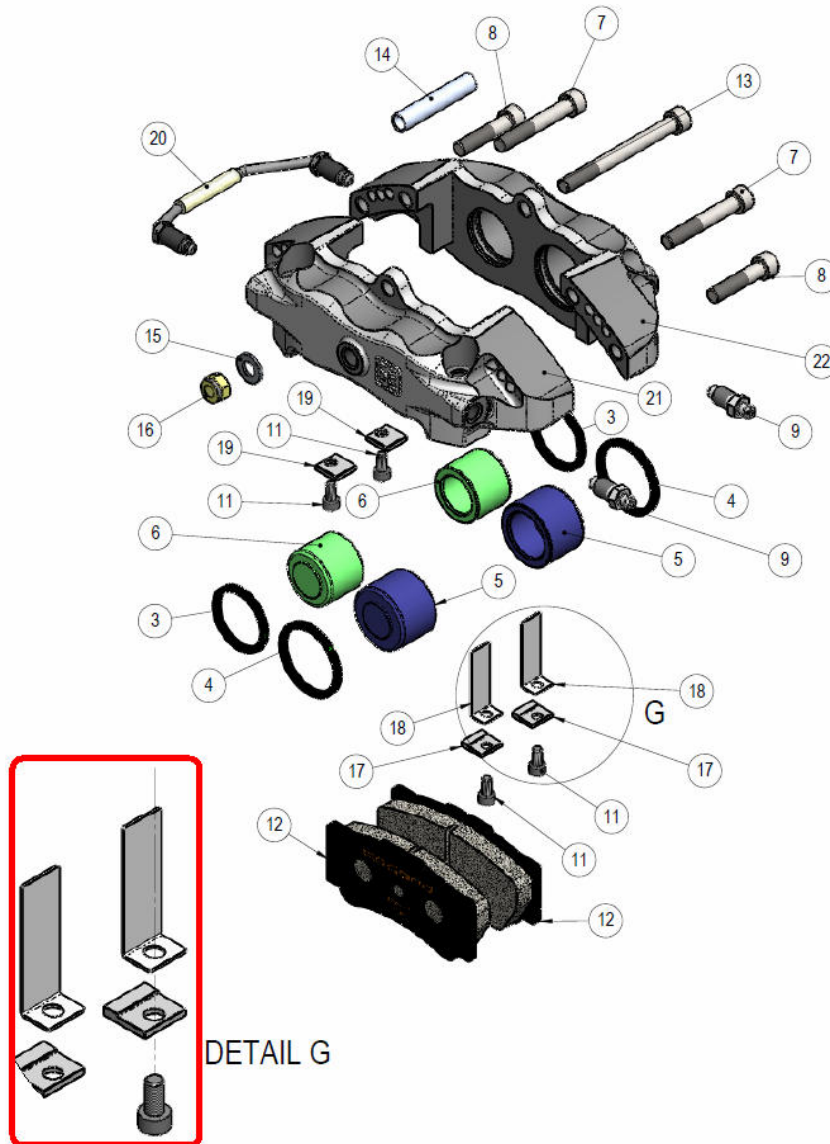
Step one is already done and step two will be finished by beginning of next week. Step 3 will start beginning of week 12 after receiving another batch of discs.

Note: Conscious that the situation is not ideal, Renault Sport will tolerate the use of old brake disc assemblies during the Eurocup pre-season collective tests.

2. Pad support plates

o Improvements

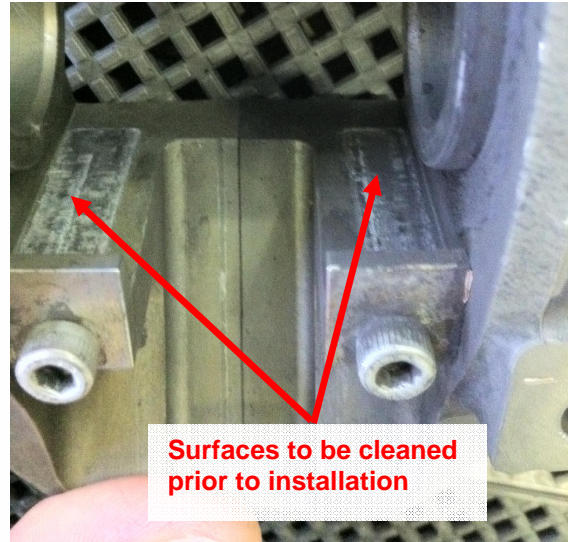
Brake pad support plates have been added to the 4 callipers in order to eradicate brake calliper wear against pad back plate. 2 support plates are then added to each calliper, and must be mounted on the leading edge (big pistons' side) as shown below:



Mounting on front left calliper

1 calliper set includes 2 pad abutment plates (17) & 2 pad support plates (18).

In order to mount them correctly, it may be required to make a chamfer and to clean the worn surfaces as shown below:



Note: the support plates are 1mm thick, but there is no need to modify the brake pads to fit them in a calliper equipped with pad support plates.

- Deployment

Renault Sport has now received the first kits of support plates and has already started delivering customers that bought 2013 kits. The delivery date for the new cars still have to be confirmed, but the delivery will be automatic as soon as we receive the parts.

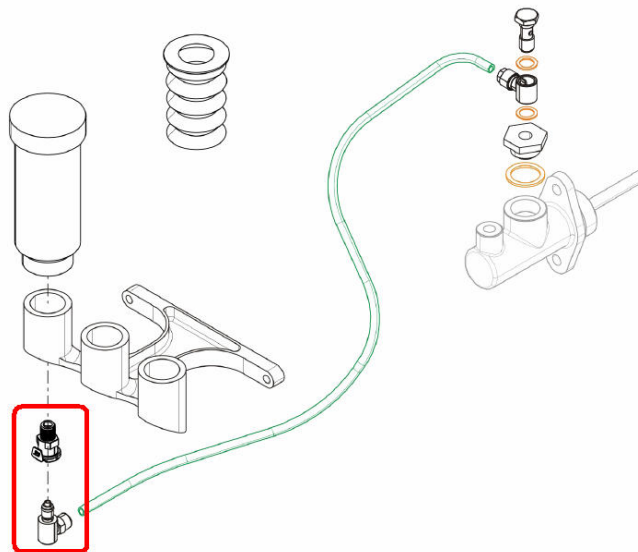
However, conscious that the parts will arrive late for some teams, Renault Sport will tolerate a non use of the pad support plates during the Eurocup pre-season Collective Tests.

3. Master cylinder couplings

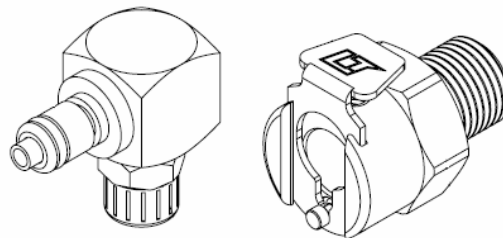
- Improvements

The master cylinder reservoir mounting has been improved to install them outside of the survival cell. The new mounting contains quick couplings (with valves integrated) to keep the possibility to put the pedalbox into the cockpit area, without bleeding the brake and clutch lines.

The new mounting is detailed below:



However, the plastic couplings you have received with your 2013 cars and/or kits seem to be fragile so we strongly advise not to use them on track. They are going to be replaced by new specific brass couplings.



New brass couplings

- Deployment

The new ones will arrive at the Renault Sport spare parts dept. beginning of next week. The distribution to all the 2013 cars & kits will be automatic and operated as soon as possible.

However, conscious that the parts will arrive late for the Eurocup teams, Renault Sport will tolerate that the reservoirs are mounted directly onto the master cylinders during the first Eurocup pre-season Collective Tests.