

REFERENCE	BT_2011_X85CUP_11
DATE	2011 september 28 <sup>th</sup>
SUBJET	Heat shield fastening reinforcement

**CONCERNED : ALL CHAMPIONSHIPS**

Following several heat shield lower support (to cylinder block) breaking, an extra bracket has been developed to reinforce the heat shield fastening.

It happens only on last generation which has been sold since middle of 2009 (reference 77 11 162 618 only for engine starter 77 11 162 617)

We remind you that if the heat shield is not correctly fastened, it can touch the +12v starter connector and seriously damage the battery. That's why we ask you to follow carefully the following instructions :

**Necessary parts and tools :**

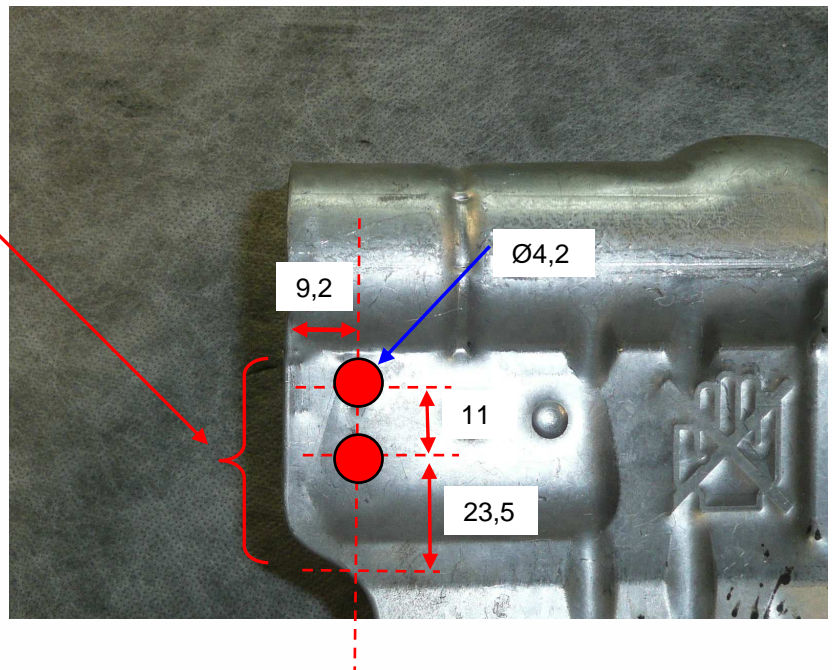
- 1 Bracket ref 77 11 167 468
- 4 washers Ø4,3x10x0,8 ref 77 11 158 357
- 2 **steel** rivet Ø4x18 ref 77 11 167 499
- Pliers
- Riveting machine (manual riveting machine too weak for steel rivet)

**Mounting instructions:**

- 1) Disconnect the battery GND
- 2) Remove the starter heat shield
- 3) Using a pliers, straight the heat shield in the following area to obtain a flat surface
- 4) Drill 2 holes Ø4,2mm at the indicated dimensions

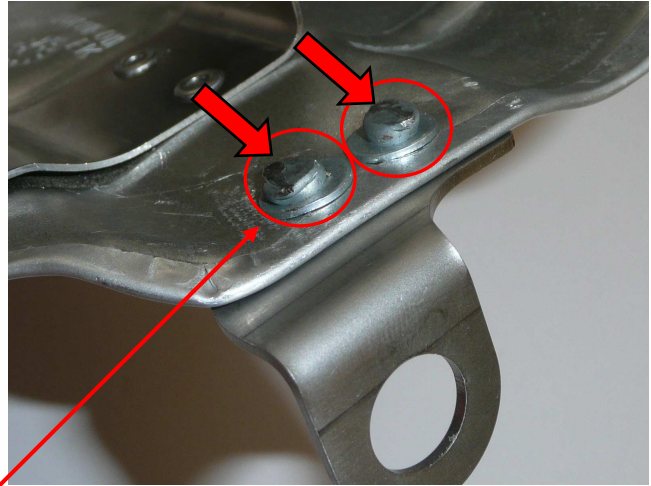
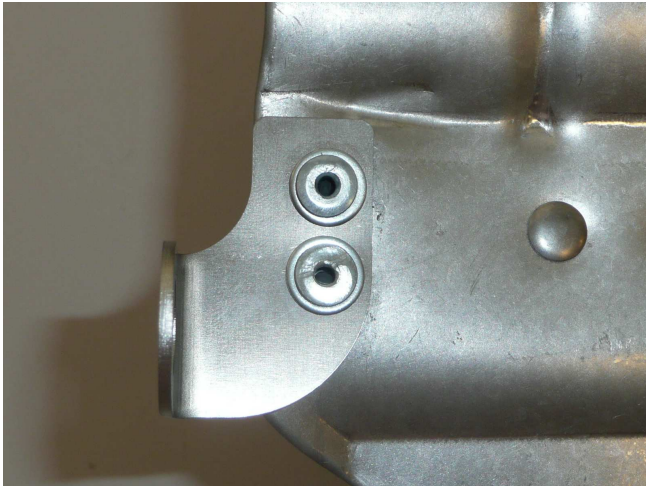
**Remark :** it can be necessary to slightly modify this localisation for a better adjustment on car fastening points.

For this, we recommend you to fit the heat shield on the starter to confirm the position before drilling the holes



- 5) Using the riveting machine fit the new bracket as indicated, use the 2 **steel** rivets 77 11 167 499 + 2 washers 77 11 158 357 per rivet (on both sides of heat shield)

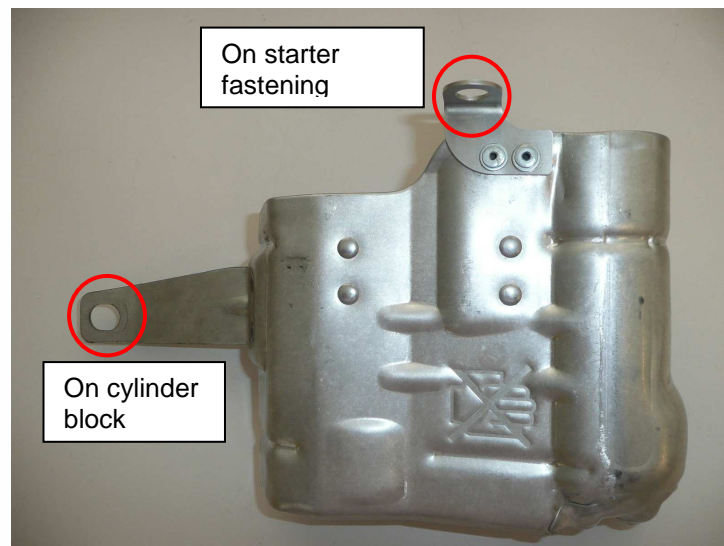
**REMARK :** we recommend to use a use a riveting machine, not a manual one (too weak for steel rivet)



**CAUTION :** On the interior side, it's necessary to crush strongly the rivet extremity to avoid contact with starter

- 6) Fit the reinforced heat shield, using the 2 fitting points (on cylinder block and starter fastening screw)

**CAUTION :** It's very important to close up the 2 fastening blades to starter body for an optimal fastening



**REGULATION:**

This reinforcement is facultative for the end of 2011 season but strongly recommended for evident reliability reasons. It will be mandatory for 2012 season

**AVAILABILITY:**

This kit will be available for next EURO CUP CLIO meeting in Barcelona next week at ALPINE Spare parts trucks. It will be also possible to order it directly to Alpine spare parts department next week under references indicated above.