



**FITTING INSTRUCTIONS FOR CP0511BL RACE CRASH PROTECTORS**  
**APRILIA RS660 2021-**



**THIS KIT CONTAINS THE ITEMS PICTURED AND LABELLED OVER PAGE.**

SOME PARTS MAY BE SHOWN FOR CLARITY OF INSTRUCTIONS ONLY.

DO NOT PROCEED UNTIL YOU ARE SURE ALL PARTS ARE PRESENT.

**PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING.**

**IF IN ANY DOUBT WHEN FITTING OUR PRODUCTS, CONSULT ONE OF OUR DEALERS OR  
HAVE FITTED BY A QUALIFIED TECHNICIAN.**

PLEASE NOTE THAT THE WAY THE KIT IS PACKED DOES NOT NECESSARILY REPRESENT THE WAY OF  
MOUNTING TO THE BIKE.

IN THE EVENT OF RUBBER WASHERS BEING USED TO HOLD COMPONENTS ONTO BOLTS,  
THESE RUBBER WASHERS CAN BE THROWN AWAY.

**DIGITAL COPIES OF THESE INSTRUCTIONS ARE AVAILABLE TO DOWNLOAD FROM**  
**[WWW.RG-RACING.COM](http://WWW.RG-RACING.COM)**



<b><u>TOOLS REQUIRED</u></b>	<b><u>GENERAL TORQUE SETTINGS</u></b>
<ul style="list-style-type: none"> <li>• Hex key set to include 2.5, 3, 4, &amp; 5mm</li> <li>• Socket set to include 8 mm, 14mm &amp; 17mm A/F sockets and wrench.</li> <li>• Torx Head set</li> <li>• Philips Screwdriver</li> <li>• 10mm Spanner</li> <li>• Torque wrench (40Nm).</li> <li>• Suitable jack to support the engine during fitting.</li> </ul>	<p>M4 BOLT = 8Nm</p> <p>M5 BOLT = 12Nm</p> <p>M6 BOLT = 15Nm</p> <p>M8 BOLT = 20Nm</p> <p>M10 BOLT = 40Nm</p> <p>M12 BOLT = 40Nm</p>

### **LEGEND**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
ITEM 1	H0086 LHS ENGINE BOLT	1
ITEM 2	H0087 RHS ENGINE BOLT	1
ITEM 3	S1345 CRASH PROTECTOR SPACER	2
ITEM 4	B0472 M10 CRASH PROTECTOR	2
ITEM 5	M10x1.25x85MM HEX BOLT	2
ITEM 6	LW0001 SHAKE PROOF WASHER	2
ITEM 7	M10 WASHER	2
ITEM 8	S0823 SPACER	2
ITEM 9	BC0002 CRASH PROTECTOR CAP	2
ITEM 10	T0009 MARKING TOOL	1

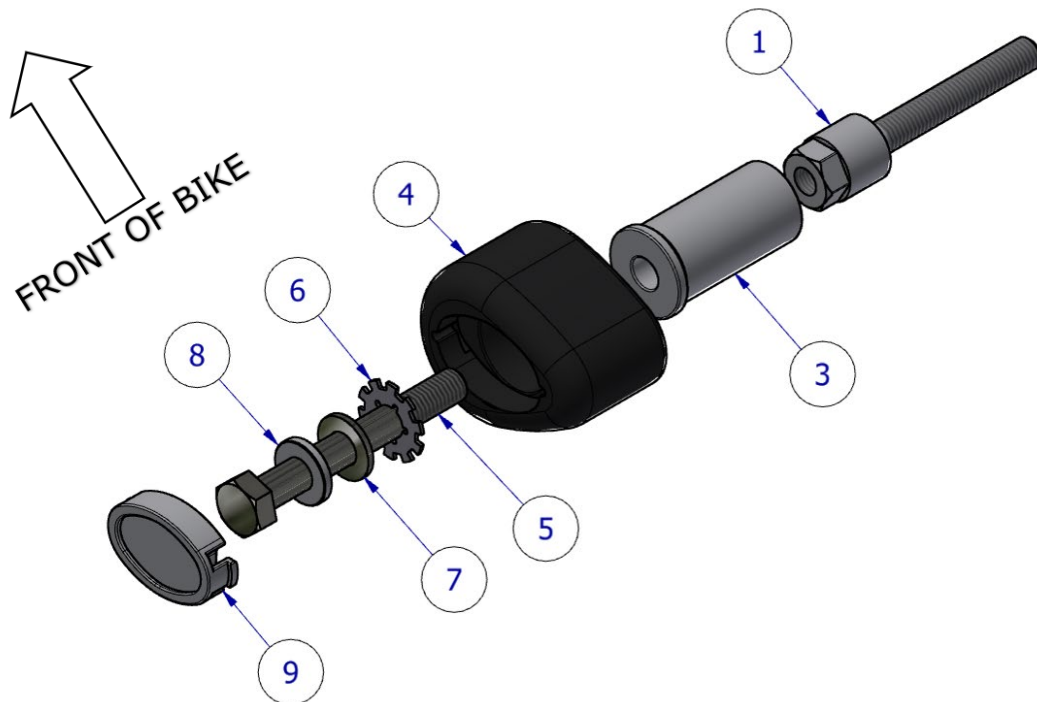
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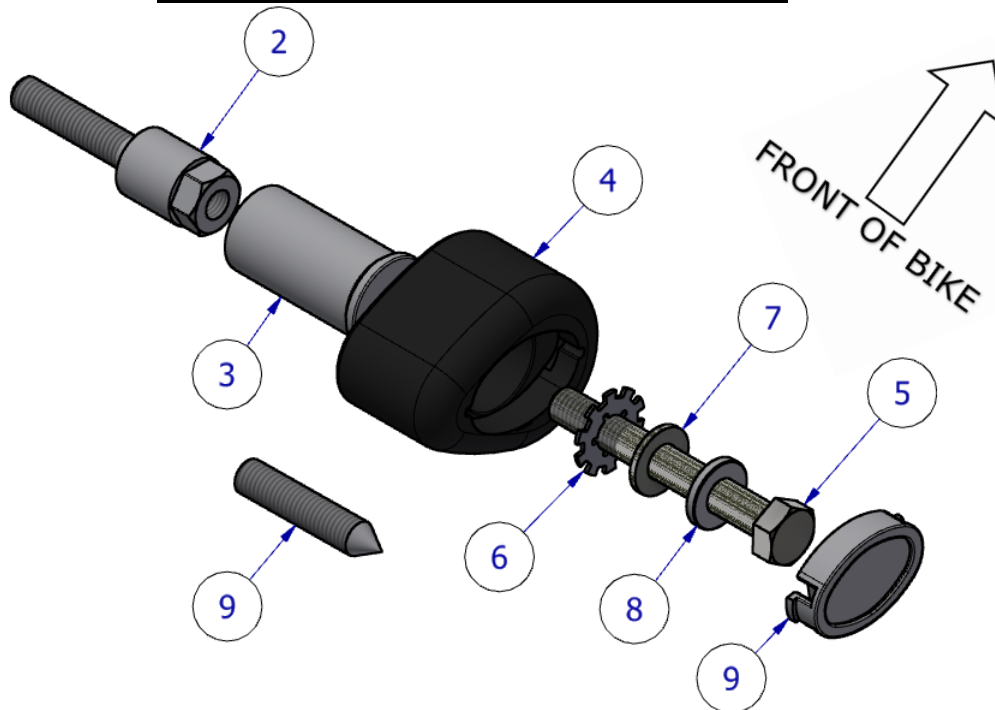
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**ASSEMBLY DIAGRAM - LEFT SIDE**



**ASSEMBLY DIAGRAM - RIGHT SIDE**



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## **AERO-STYLE CRASH PROTECTOR ORIENTATION**



### **FITTING INSTRUCTION PICTURES**



Picture 1



Picture 2



Picture 3



Picture 4

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Picture 5



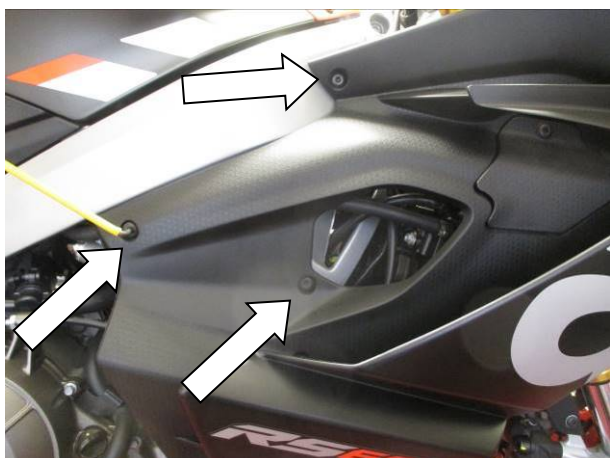
Picture 6



Picture 7



Picture 8



Picture 9



Picture 10

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Picture 11



Picture 12



Picture 13



Picture 14



Picture 15



Picture 16





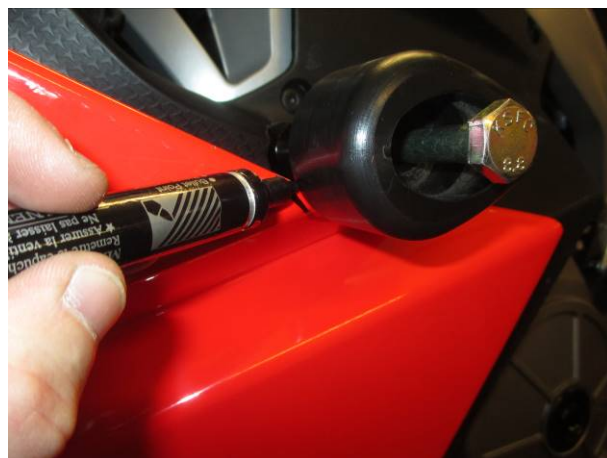
Picture 17



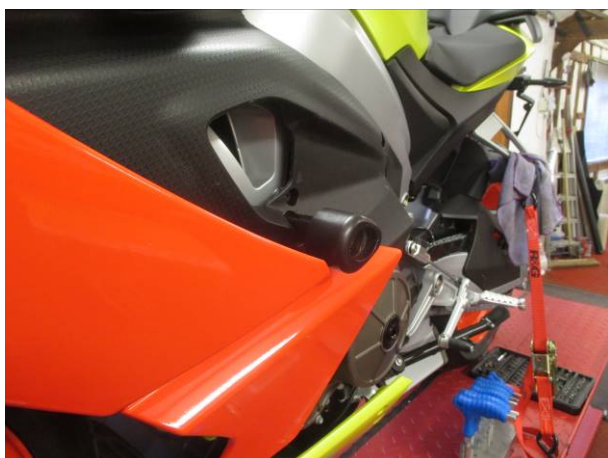
Picture 18



Picture 19



Picture 20



Picture 21



Picture 22

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**PLEASE NOTE THIS KIT IS A 'DRILL KIT' WHICH WILL REQUIRE MODIFICATION TO THE STANDARD FAIRING, AS RACE FAIRINGS MAY VARY IT IS UP TO YOU TO ENSURE THE FAIRING IS CORRECTLY MODIFIED TO ACCEPT THE KIT USING THE GUIDE BELOW.**

**PLEASE NOTE THAT BEFORE BEGINNING, YOU WILL NEED A SUITABLE JACK TO SUPPORT THE ENGINE WHEN REMOVING OEM ENGINE BOLTS. IF YOU ARE NOT COMFORTABLE, HAVE FITTED BY A QUALIFIED TECHNICIAN. READ ALL STEPS BEFORE PROCEEDING.**

## **FITTING INSTRUCTIONS**

### **Fairing removal**

- Starting with the left-hand side, begin by removing the inner panel inside the front fairing, to do this:
  - Using a Philips head, remove the screw shown in **picture 1**.
  - using a 2.5mm hex key, remove the upper panel bolt as shown in **picture 2**.
  - Remove the 3 x fairing bolts on the lower section of the panel using a 2.5mm hex key as shown in **picture 3**.
  - Remove the panel by lifting this up and back as shown in **picture 4**.
- Next, remove the large central fairing panel, to do this;
  - Using a 4mm hex key, Remove the bolt arrowed in **picture 5**.
  - Using a 8mm Spanner or socket, remove the screw arrowed in **picture 6**.
  - Using a torx tool, remove the 3 x inner bolts of the radiator surround as shown in **picture 7**.
  - Remove the plastic push pin from the front of the fairing under the headlight by loosening the central pin and pulling the pin from the fairing as shown in **picture 8**.
  - Using a 4mm hex key, remove the 4 x fairing bolts shown in **pictures 9 & 10**, being careful to support the panel as you do this.
  - Ensuring no fasteners remain, carefully remove the panel from the bike, ensuring to disconnect the locating tabs from underneath the headlight.
- Repeat this process for both sides of the motorcycle so both mid panels are removed as shown in **picture 11**.
- The belly pan is supported by 4 x hex fairing bolts as shown in **pictures 12 & 13**, these should be removed while supporting the belly pan from underneath.
- Ensuring to remove the rubber hoses secured through the belly pan as shown in **picture 14 & 15**, carefully lower the belly pan from the bike and slide this clear of the underside of the bike.

### **LHS + RHS Engine bolt replacement**

- With bodywork removed, place a suitable jack or engine stand underneath the engine to support when removing engine bolts as shown in **picture 16**.
- With the engine supported from underneath, remove the LHS engine bolt from the frame arrowed in **Picture 17**. **DO NOT REMOVE BOTH LHS AND RHS ENGINE BOLTS AT THE SAME TIME**.
- Replace the engine bolt with the LHS replacement stud bolt (**H0086 – Item 1**) in the orientation shown in LHS **assembly diagram** on page 3, tighten to the recommended torque using a torque wrench and 17mm socket.
- Repeat the process for the RHS fairing bolt, replacing with the RHS replacement bolt (**H0087 – Item 2**) in its place. **DO NOT REMOVE BOTH LHS AND RHS ENGINE BOLTS AT THE SAME TIME**.

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### Fairing Modification

For OEM Fairing, both inner and outer fairing will need modification (race fairings may vary) repeat the steps below for each side:

- To determine where to cut the fairing to accommodate the crash protector, with fairing removed, insert the marking tool (T0009 - item 9) into the replacement engine bolt mount hole so that it is level.
- Re-fit the fairing and press the fairing into the marking tool so that a mark is made on the inside of the panel. This will act as a centre guide when modifying the fairing.
- Use a drill to make a pilot hole in marked position on the inner fairing, followed by a 28mm hole saw to enlarge the hole so it is big enough for the spacer to pass through as shown in **picture 18**.
- Remove the marking tool from the replacement engine bolt.
- Loosely re-fit the fairing and check the fairing hole correctly lines up with the threaded engine bolt adapter.
- With fairing re-fitted, slide one crash protector over one M10 bolt (item 5) included with this kit followed by one spacer (item 3) and insert into the fairing hole to engage with the mount as shown in **picture 19**, do not tighten.
- Location of the bobbin will detail where the outer fairing will need to be cut to accommodate the crash protector. **The crash protector must be positioned as aero-style crash protector orientation diagram on page 2, with bigger end toward front of bike.**
- Use a marker or pen to draw around the crash protector to be cut as shown in **picture 20**.
- Use a Dremel or similar cutting tool to trim the outline of the fairing and remove.
- Tidy up the cut with sandpaper or similar.
- Repeat the steps above for both sides of the bike.
- Fully Re-install the fairing as by reversing the steps followed to remove, ensuring that the rubber hoses are relocated back into the belly pan and that the locator clips at the front of the mid panel line up correctly with the nose cone.

### Crash Protector installation

- Referring to **LHS & RHS Assembly Diagrams** on page 3, follow the steps below:
  - Slide one small spacer (item 8 – S0823 – 3mm) onto the M10x1.25x85mm long hex head bolt (item 5).
  - Slide one of the 10mm (item 8) washers over the bolt so the washer sits against the spacer.
  - Slide one shake proof washer (item 6) over the bolt so it sits against the washer just fitted.
  - Next slide the bolt with washers (item 7) through either crash protector (item 4) so the head of the bolt and washers goes into counter-bore in the crash protector.
  - Locate one crash protector spacer (item 3 – S1345) over the exposed end of the bolt.
  - Offer the crash protector up to the bike by locating the bolt into the new LHS frame mount so the crash protector sits into the crash protector cut out.
  - Tighten the bolt until you feel some compression from inside the protector using a 17mm socket and wrench. **Please note, the crash protector must be positioned as aero-style crash protector orientation diagram on page 2, with bigger end toward front of bike.**
  - Turn a little more so that you feel the compression increase slightly. Then apply a quarter turn. Do not over tighten as damage can occur to the bike. Do not exceed 40Nm of torque.
- If not already fitted, fit a bubble sticker into recess of one crash protector cap (**item 17**).
- Fit a crash protector cap (**item 9**) into each crash protector.

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- Before riding, check both sides are secure, and the crash protectors cannot rotate.
- Check tightness of each side regularly.

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