



FITTING INSTRUCTIONS FOR RSET40
REARSETS – ROAD + RACE SHIFT
HONDA CBR1000RR-R + SP 2020-



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 FROM:

WWW.RG-RACING.COM



<u>TOOLS REQUIRED</u>	<u>GENERAL TORQUE SETTINGS</u>
<ul style="list-style-type: none"> • SET OF HEX KEYS TO INCLUDE 3, 4 & 5, 6mm <ul style="list-style-type: none"> • 10mm + 12mm A/F SPANNERS <ul style="list-style-type: none"> • 10mm SOCKET • BRAKE BLEEDING EQUIPMENT 	M4 BOLT = 8Nm M5 BOLT = 12Nm M6 BOLT = 15Nm M8 BOLT = 20Nm M10 BOLT = 40Nm M12 BOLT = 40Nm

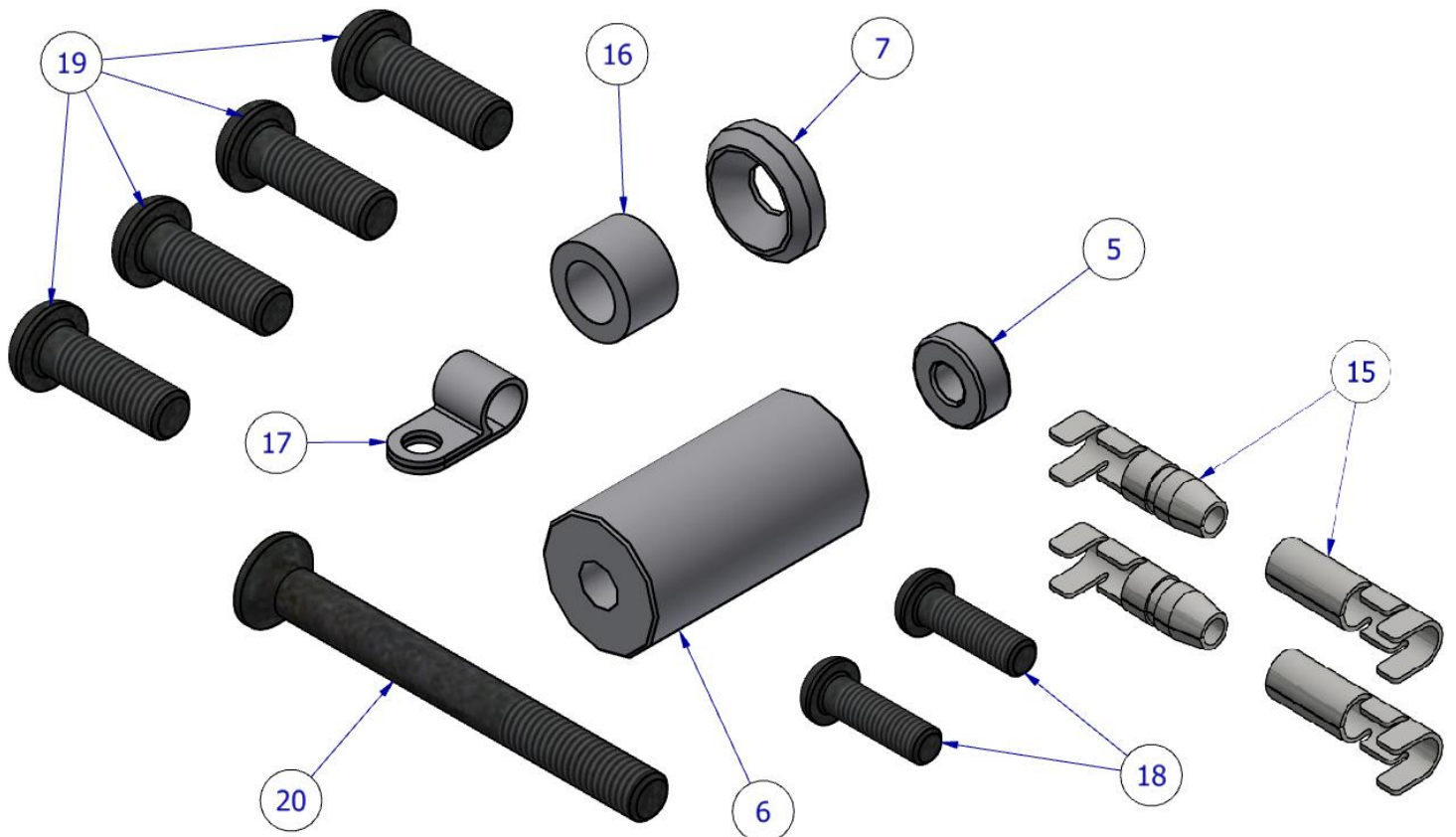
LEGEND		
ITEM NO.	DESCRIPTION	QTY
ITEM 1	LHS FOOTREST ASSEMBLY	1
ITEM 2	RHS FOOTREST ASSEMBLY	1
ITEM 3	GEAR LINKAGE ADAPTER BLOCK	1
ITEM 4	LHS GEAR LEVER ASSEMBLY	1
ITEM 5	S0454 6MM GEAR LINKAGE SPACER	1
ITEM 6	S1315 45MM M8 GEAR LEVER SPACER	1
ITEM 7	S1317 GEAR LEVER OUTER SPACER	1
ITEM 8	SHIFT LINKAGE ROD 90MM	1
ITEM 9	SHIFT LINKAGE ROD 115MM	1
ITEM 10	SHIFT LINKAGE ROD 200MM	1
ITEM 11	SHIFT LINKAGE ROD 215MM	1
ITEM 12	BRAKE LIGHT PRESSURE SWITCH	1
ITEM 13	RSET40HOSE - 400MM FLEXIBLE BRAKE LINE - ABS FITMENT	1
ITEM 14	M10 SEALING WASHER	4
ITEM 15	CON0004 BRAKE LINE CONNECTOR	1
ITEM 16	S1205 ABS BLANKING SPACER (FOR RACE SHIFT)	1
ITEM 17	'P' CLIP - BRAKE HOSE HOLDER	1
ITEM 18	M6X20MM MASTER CYLINDER FIXING BOLTS	2
ITEM 19	M8x25MM BUTTON HEAD BOLT (2 x LHS BASE PLATE MOUNTING BOLTS) (2 X RHS BASE PLATE MOUNTING BOLTS)	4
ITEM 20	M8x90MM COUNTERSINK BOLT - LHS GEAR SHIFT LEVER PIVOT BOLT	1

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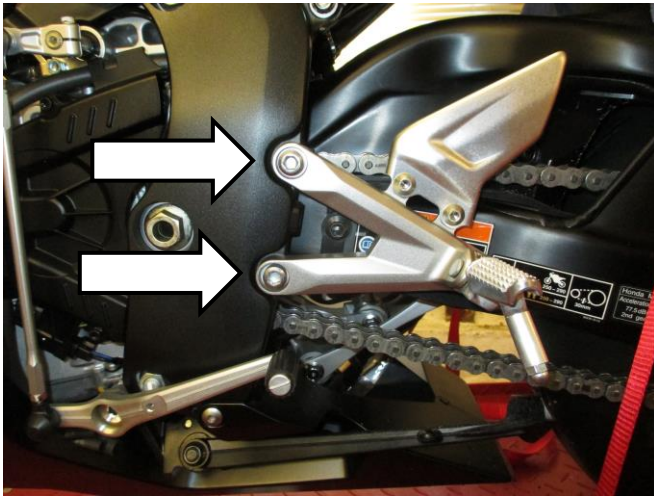
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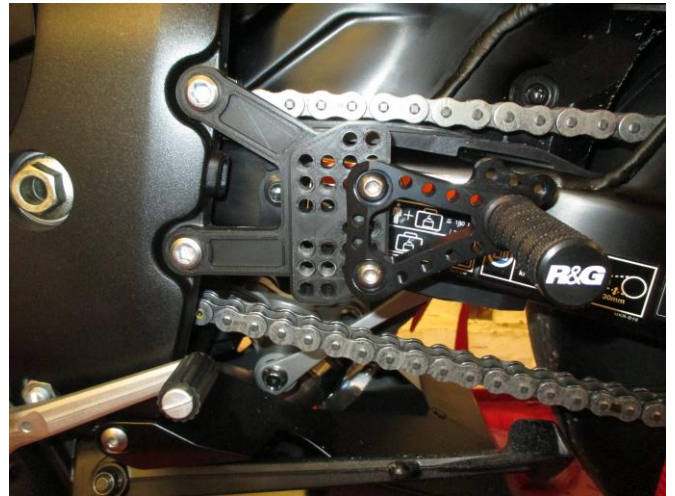




FITTING PICTURES



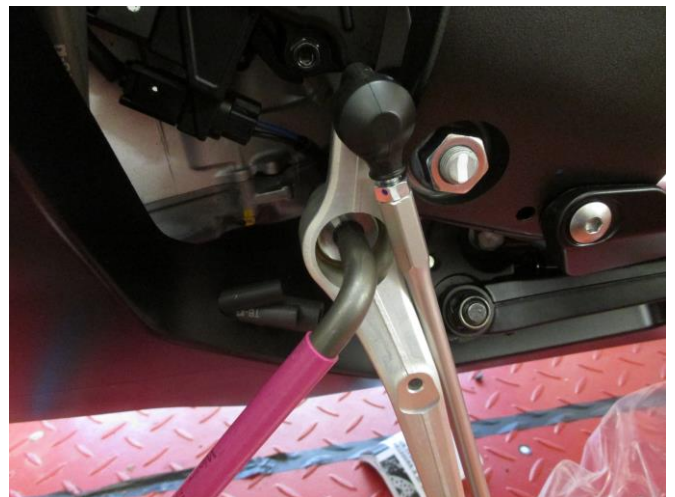
Picture 1



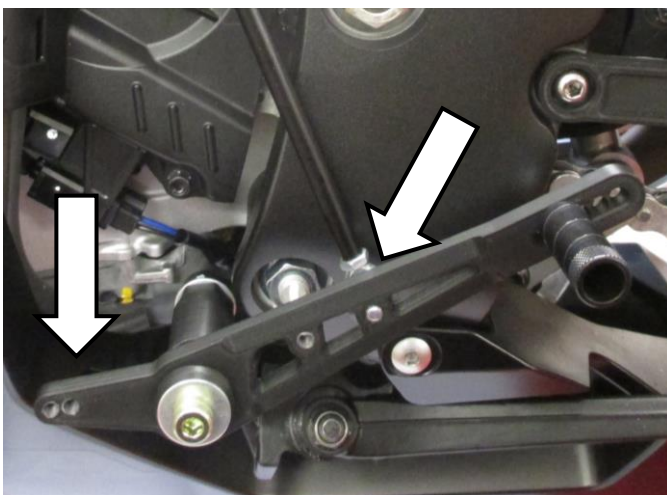
Picture 2



Picture 3



Picture 4



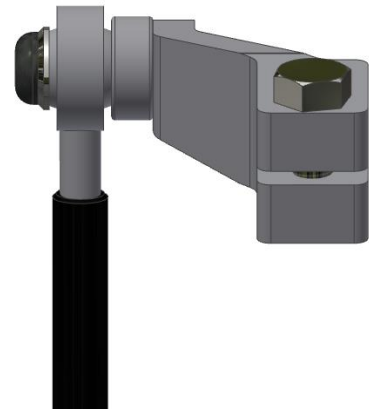
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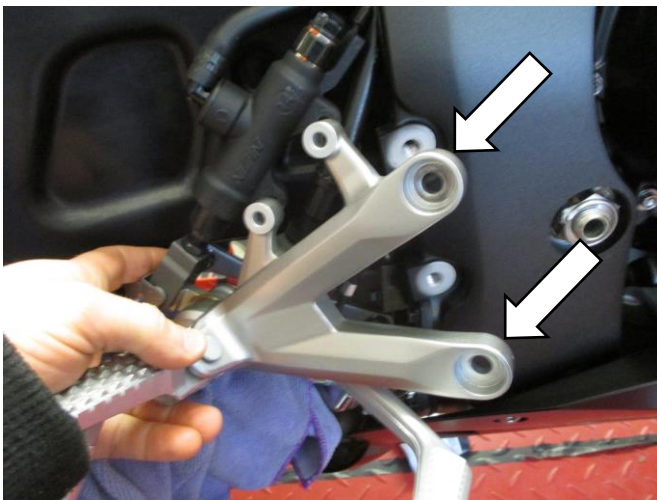
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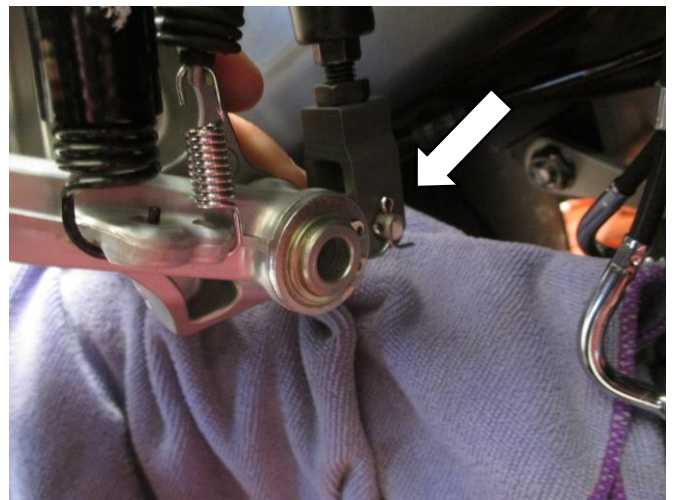
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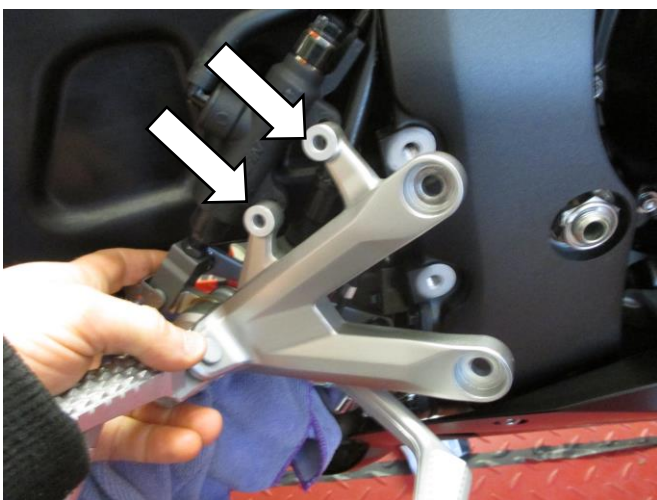
Picture 8



Picture 9



Picture 10



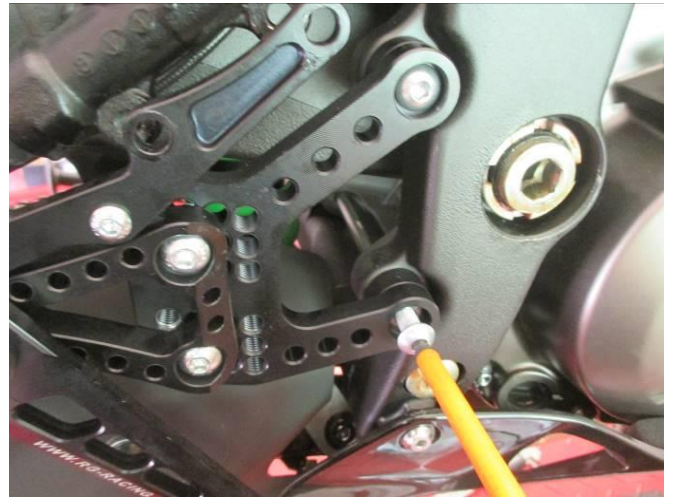
Picture 11



Picture 12



Picture 13



Picture 14



Picture 15



Picture 16



Picture 17



Picture 18



Picture 19

FITTING INSTRUCTIONS

BEFORE STARTING: PLEASE BE AWARE THAT FITTING ADJUSTABLE REARSET KIT WILL INVOLVE REPLACING THE ORIGINAL ABS HARD LINE WITH A FLEXIBLE ALTERNATIVE PROVIDED. THIS SHOULD BE DONE BY A QUALIFIED TECNICIAN AND TESTED BEFORE RIDING. DO NOT PROCEED IF YOU ARE NOT COMPETENT TO MODIFY AND BLEED MOTORCYCLE BRAKING SYSTEMS.

PLEASE BE AWARE THAT EACH ASSEMBLY PROVIDED IS ONLY LOOSELY ASSEMBLED. FULL FITTING WILL REQUIRE TIGHTENING OF EACH BOLT TO RECOMMENDED TORQUE WITH THE ADDITION OF A THREAD LOCKING COMPOUND – SUCH AS LOCTITE.

Gear lever side LHS:

- To begin, Remove the original footrest hangar using a 6mm hex key as shown in **Picture 1**.
- The left-hand foot peg assembly (**item 1**) can be offered up and attached using the two M8 x 25mm bolts (**item 19**) as shown in **Picture 2**. Adjust the foopeg position to suit your preference by moving the foot peg hanger bracket to a new position with the bolts provided in the assembly.

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If removing the OEM Quickshifter (SP Models):

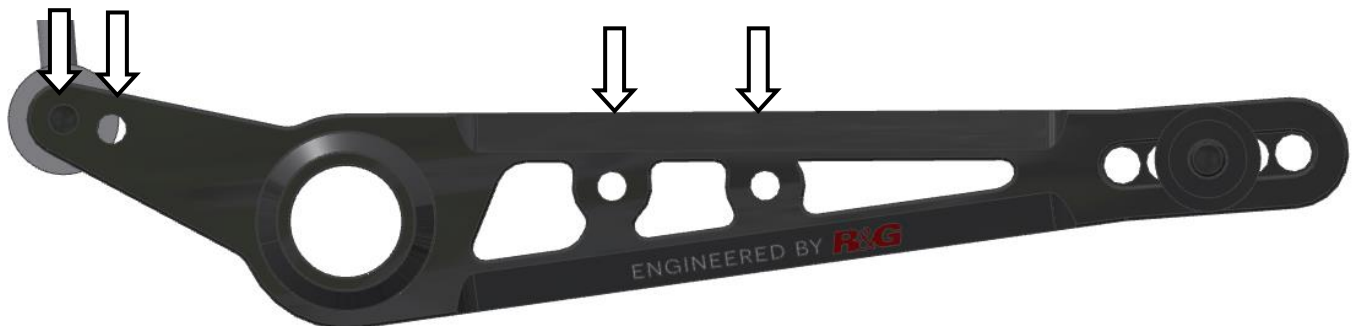
- Disconnect the OEM gear linkage by loosening the adjuster nuts and rotating the bar to remove from the OEM gear lever.
- Disconnect the quickshifter wiring from behind the LHS fairing and remove.
- Remove the hex bolt on the OEM gear shift block and remove the block from the splines of the gear selector shaft as shown in **Picture 3**.
- Replace the OEM shift link block with the R&G gear linkage adapter block (**item 3**) as shown in **Picture 4**. Do not tighten the block as this may need to be adjusted later.

If using RSET in conjunction with OEM quickshifter (SP Models):

- Disconnect the OEM gear linkage by loosening the adjuster nuts and rotating the bar to remove from the OEM gear lever.
- Remove the hex bolt on the OEM gear shift block and remove the block from the splines of the gear selector shaft as shown in **Picture 3**.
- Remove the OEM gear lever using an 8mm hex key as shown in **picture 4**.
- On the R&G gear lever assembly (**item 4**), ensure that the rose joint in is in the correct position for your chosen gear shift pattern fitted from the rear. Refer to the diagram below and to configure the R&G Gear shift lever (**item 4**). The throw of the lever can be adjusted by using the forward or rearward holes to suit your preference.

ROAD SHIFT

RACE SHIFT



- Affix the new R&G gear lever assembly as shown in **picture 5** in place of the original using the 90mm CSK bolt (**item 20**), **S1317** spacer (**item 7**) and 45mm gear lever spacer (**item 6**) in the order shown below:



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If using in conjunction with OEM quickshifter (SP Models):

- Take either of the shorter gear linkage rods (**items 8 & 9**) and test to establish the most suitable length depending on the chosen gear lever height.
- Connect the chosen gear linkage rod (**item 8 or 9**) or OEM link rod to the OEM quick shifter.
- Connect the LH threaded ball joint to the open end of the gear linkage rod. (you may need to remove the LH threaded ball joint from the gear lever) and re-affix this to the gear lever in the same way it was removed as shown in **Picture 5**. Ensure when rotating the gear shift rod to keep the thread even at both ends of the rod.
- With all components connected, fit the gear linkage adapter block to the splined gear shaft as shown in **picture 6**. Rotate the gear linkage adjuster block (item 3) so that the link rod is perpendicular to the splined gear shaft and tighten the fitting bolt as shown in **picture 7**.

If removing OEM quick shifter:

- Disconnect the ball joint from the gear lever assembly (item 3).
 - Connect the most suitable gear linkage rod (**items 10 or 11**) or the OEM link rod for your chosen foot peg position to the 2 ball joints and re-affix the gear lever ball joint in the same way it was removed as shown in **Picture 6**, depending on your chosen shift pattern. Ensure when rotating the gear shift rod to keep the thread even at both ends of the rod.
 - Connect the Gear linkage adapter block to the gear selector shaft as shown in **picture 6**.
 - With all components connected, fit the gear linkage adapter block to the splined gear shaft as shown in **picture 6**. Rotate the gear linkage adapter block (**item 3**) so that the link rod is perpendicular to the splined gear shaft and tighten the fitting bolt as shown in **picture 7**.
- Adjust the gear shift link rod by rotating so that both threads are tightened until the desired gear lever height is achieved.
 - Ensure the linkage rod runs straight, the gear linkage adapter block should be spaced by a S0454 6mm spacer (**item 5**) to ensure the rod runs straight as shown in **picture 8**.
 - Tighten the locking nuts with added thread locking compound so that the link rod is secure.
 - Check operation of the gear lever and ensure all gears can be selected correctly and the gear lever returns correctly to the neutral position.
 - Ensure all bolts are torqued correctly and assembled with thread locking compound.

Brake Lever Assembly RHS

Because of the complexity and inherent dangers involved in undertaking any work involving the braking system we strongly recommend a qualified mechanic fits/or checks after the fitting of this product.

- Disconnect the brake light switch from the OEM footrest by removing the spring from the OEM switch.
- Disconnect the two mounting bolts from the footrest assembly using a 6mm hex key as shown in **Picture 9**, this will help when disconnecting the master cylinder.
- To disconnect the rear brake master cylinder from the OEM footrest hangar, remove the split pin from the rear of the pivot arrowed in **Picture 10**, and remove the slide pin.
- Remove the 2 mounting bolts arrowed in **Picture 11** from the heel plate to remove the master cylinder and disconnect the footrest hanger from the bike.
- Loosen the adjuster nut and remove the lower nut and pivot bracket from the OEM brake cylinder assembly as shown in **picture 12**.
- Attach the female threaded ball joint included with the brake assembly (**item 2**) to the threaded rod on the rear brake cylinder as shown in **Picture 13** (this will be adjusted later).

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- Affix the RHS footrest assembly (**item 2**) to the bike using two M8x25mm bolts (**item 19**) & both LHS base plate spacers (**item 4**) as shown in **Picture 14**.
- Attach the master cylinder using the two M6 x 25mm bolts (**item 18**) in a neutral position determined by the ABS hard line. Move the brake lever to the desired height in a neutral position and adjust the new female ball joint so the action of the master cylinder pressure shaft is directly in line with master cylinder. Now reconnect the brake lever to the master cylinder as shown in **Picture 15**, ensuring the spacer is located between the lever and ball joint and the locking nut is fully engaged.

ABS Line replacement

- The fixed ABS line will need to be replaced with the flexible line that is supplied in the kit (**item 13**) so that all foot peg positions can be used.
- Remove the rider's seat.
- Remove the side panels from the fairing by removing the 3 x fairing bolts from each side of the bike
- Remove the fuel tank cover panel from the front of the bike as shown in **picture 16**.
- Remove the seat location bracket to gain access to the ABS unit as shown in **picture 17**.
- Remove tank securing bolts from each side of the fuel tank and lift the tank and support in place. This will provide access to the ABS unit below, as shown in **Picture 18**. Remove the ABS line arrowed.
- When fitting the RSET40HOSE flexible brake line (**item 13**):
 - Ensure all painted surfaces are covered and protected from spills.
 - Remove the lower end of the brake line from the master cylinder and drain the brake fluid into a suitable container.
 - Remove the brake line from the ABS module that feeds to the rear master cylinder and replace it with the flanged end on the braided line.
 - Feed the braided line along the same route as the OEM line and fit to the master cylinder *Ensure to use new sealing washers (item 14) on new banjo connections.*
 - Use the 'P' clip (**item 17**) to help route the line as original and ensure the line cannot become trapped when seat and tank are replaced.

If removing the ABS function (recommended for RACE use only):

- Follow the instructions above and use the S1205 stainless blanking spacer (**item 16**) to replace the banjo fitting on the ABS Unit. *Ensure to use new sealing washers (item 14) on new banjo connections.*
- Re-fit the tank, fairing and seat unit.

If brake light function is required for road use:

- In place of the original banjo bolt on the top of the rear master cylinder, use the Banjo brake pressure switch (**item 12**).
- we recommend cutting the original wiring to connect the brake light sensor switch wires to the original wiring using the CON0004 bullet connectors (**item 15**).

PLEASE NOTE YOU WILL HAVE TO BLEED THE BRAKING SYSTEM.

- When the flexible line has been attached and correct brake function is achieved, adjust the foot peg positions for comfort and position using the sub plate and two bolts. **The same foot peg position should be used on both sides on the bike.**
- Adjust the brake lever height by disconnecting the female rose joint on the brake master cylinder and using the thread to change the rod length which will adjust the lever height, reconnect the brake rod when happy with the position.
- Ensure the brake reservoir is tube is not kinked and fluid can flow freely, you can shorten this tube if necessary.

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- Ensure the brake assembly is fully fitted and all bolts are secured with the correct torque and thread locking compound as shown in **Picture 19**.

TEST THE BRAKE FUNCTION THOROUGHLY BEFORE RIDING.

- Check all components are secure and all bolts are tight before riding, and the gears and brake levers operate smoothly and without binding. **Check bolt tightness regularly.**

IMPORTANT: The above instructions are for guidance only. It is your (the installers) responsibility to ensure all components are secure and in no circumstances interfere with other bike components they are not meant to, failure to do this can be dangerous and may cause damage to the rider or motorcycle.

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