Vehicle **Toyota LC200** Year All Models Type **Wagon** Part **Rear Bar** 

### **Applicable to Part Numbers**

K20000, K20005, K20100-S, K20105-S, K20000-S, K20005-S, KIT200FLVX, KITFLVXL-JC, KIT200FLVXR-JC, KIT200L-S-JC, KIT200R-S-JC, KIT200FLGXL, KIT200FLGXL-L-JC, KIT200FLGXL-R-JC, KIT200L-JC, KIT200R-JC, KITGX200, KITGX200L-JC, KITGX200R-JC, KIT200, KIT200L-JC, KIT200R-JC, KIT200-S, KIT200L-S-JC, KIT200R-S-JC

See also related fitting instruction's for reversing sensors, carriers and jerry can holders Date published December 6, 2018

### **IMPORTANT - BEFORE COMMENCING INSTALLATION**

Please verify the part number corresponds with the list above. Read through these instructions and check items in the supplied fitting kit matches the attached list. IMPORTANT: If you are fitting carriers with this bar FIT CARRIERS FIRST

Please Note:

For vehicles fitted with factory sensors it is important and essential to test and validate the sensors are enabled and operational prior to commencing removal from the OEM bumper and installation into the new rear bar.



### **BUMPER REMOVAL - FIRST STEP**

1. First step before fitting carriers or replacement bar is to remove the original bumper:

(i) Undo screws holding the mudflaps to the end of the bumper.

(ii) Remove the plastic cover panels from under each corner of the bumper

(iii) Remove the black plastic cover panel from the top of the bumper (lever off with a screwdriver)

(iv) Remove all screws and plugs from the plastic bumper and remove the bumper from the vehicle.

2. If vehicle fitted with factory sensors:

(i) Disconnect plug on L/H side, remove bumper. Un-plug each of the sensors from sensor harness. (Fig 1)

(ii) Remove the four sensors from the bumper (Make note of which hole each sensor came from as they must be relocated to the same position) (Fig 2)

(iii) Remove sensor harness from the step - refer step 13

#### NOTE: VX/Sahara models from Jan 2013 to Aug 2015. The two centre sensor retainers must be replaced with flat sensor retainers K6128 (2 off) before refitting.

3. Remove the black plastic cover panel from the centre towbar section of the bumper. Fit the plastic bumper back onto the vehicle to ensure it seats exactly back into original position.





### **BAR FITMENT**

- 1. Remove the black plastic cover panel from the centre towbar section of the bumper. Fit the plastic bumper back onto the vehicle making sure it seats exactly back into original position.
- Mark lines on the bumper as per photos. Measurements 205mm & 193mm are a straight flat line down from the tail light. Measure 260mm around the curve of the bumper.

#### (Fig 3 and 3a are of facelift model post August 2015)



Fig 3

Fig 3a

### NOTE: If fitting to a pre August 2015 (pre facelift 200) cut along dotted line of the cardboard template. (Fig 4, 4a)



Fig 4



Fig 4a

3. Tape the cardboard template to the bumper. The top edge sits on the lines marked in step 2.







THE PHOTO SHOWS THE RIGHT HAND SIDE OF THE VEHICLE AND THE WORD 'LEFT' ON THE TEMPLATE READS BACK TO FRONT. WHEN YOU USE THE TEMPLATE ON THE LEFT HAND SIDE THE WORD 'LEFT' WILL READ CORRECTLY



- Tape the bottom of the template to the bumper with the centre section of the template overlapping the outside sections. Do this gently. The bottom edge of the three sections line up together as one continuous edge.
- 5. With a pen or fine tip marker, draw the line along the full bottom edge of the template.

Fig 6

4.



Fig 7



- 6. At the wheel arch end, measure down 305mm and mark a line as per left photo. (Fig 7)
- 7. As per right photo. With a straight edge, join the two lines from the end of the template and the 305mm line. Repeat steps 8 13 on the left hand side. (Fig 8)



Fig 9

### TURN THE TEMPLATE AROUND SO THAT THE WORD 'LEFT' READS CORRECTLY.

8. Mark a line across between the outside notch-outs in the centre section of the bumper. The very centre above the tow hitch will be higher than your line. (Fig 9)

 As per Fig 10 & 11. Mark a line between the centre outside notchout and the end of the template line on the corner. Do this for both sides.





Fig 10



Fig 12

10. The bumper is now ready to cut.

#### Check that the bumper is fitting EXACTLY as normal onto the vehicle.

- We cut with a 100mm flat cutting disc in an angle grinder.

- As the vehicle is in standard form, there is nothing to touch behind the bumper with the disc when cutting. Check that there is no after market additions which will be damaged during cutting.

- Cut the bumper following the line exactly.

- 11. Clean the edge of the cut and then remove the bumper.
- 12. Unclip the black plastic space panel from underneath the bumper.
- 13. Turn it upside down and mark the sections to be cut down as per photos below.



Fig 13



Fig 14



Fig 15

Measure from the centre across. Pictures show the right hand side, if the spacer were in position on the vehicle. Grind these sections down 10mm, so as they clear the Kaymar bar mounts when the bar is fitted. Do the same to both sides. FOR VEHICLES WITH SENSORS - ONCE THIS IS DONE REFIT THE SENSOR HARNESS

14. Splice into the vehicle trailer plug wiring on the right hand corner of the body. Use wire supplied, Long length goes across to the left side. Short length for the right hand side.

### DO NOT SPLICE INTO WIRING BEHIND THE LIGHTS IN THE BODY. VEHICLE MUST HAVE A TRAILER PLUG WIRING HARNESS FITTED. IF IT DOES NOT HAVE ONE ALREADY FITTED. SPLICE AN EXTRA PLUG TO THE BROWN WIRE FOR THE NUMBER PLATE LAMP.

- LED LIGHTS
- Yellow Indicator White – Earth Brown – Tail Red – Brake/ Stop

Black – Reverse

#### VEHICLE

Yellow – Left Hand Indicator Green – Right Hand Indicator White – Earth -Red - Stop Brown - Tail Black - Reverse

### NOTE: For facelift models after Aug 2015 - If fitting a camera to a carrier or jerry can holder (K6314JC-KIT, K6314-KIT) refer to separate installation instructions.

15. Re-fit the mudflaps.





Fig 17

- 16. Position the gold mudflap bracket to the back of the mudflap and against the body sill lip (brackets are marked left and right). Make sure the mudflap is sitting in its original position and mark the two drill holes in the sill lip. Do this on both sides and drill holes 7mm diameter.
- 17. Bolt the bracket to the body and mudflap using 6mm screws and flange nuts supplied. Fit an original screw to the inner most hole in the mudflap. Make sure the mudflap is sitting in its original position.



Fig 18

Left hand side Pictured

- 18. Fit the side wing support braces to the chassis. They are marked left and right. Use two M14 bolts on wire through the square holes on the inside of each chassis rail. The left hand hole is positioned next to the rubber exhaust mount. The bottom of the brace must fit hard up to the bottom of the chassis. If fitted with factory sensors. Re-fit sensors into Kaymar bumperettes. Ensure they go back into correct holes.
- 19. Clip the spacer back to the bumper and fit the bumper back onto the vehicle



20.

Fig 19

Position the slotted angle bracket against the bottom of the body vent. Fit the slots of the angle bracket over the ribs of the vent and mark the two drill holes. Drill two 5mm holes and fix angle to the vent with pop rivets supplied, both sides.



Fig 20

- 21. Fit the pinch weld edging to the bottom cut edge of the plastic bumper. Push it firmly into place. The pinch weld edging must look flat with no low spots which could touch the bar. Grind or sand back any low spots so as the pinch weld will look even with the top of the bar once it is fitted. The area above the tow hitch will be higher.
- 22. Fit each side Kaymar bumpers onto the chassis. You will need to slightly lift the plastic step to allow the welded on nut to fit underneath.
- 23. Slip one 10mm x 30 bolt and washer into the side wing bracket and the side wing support brace. LEAVE THIS LOOSE.
- 24. Push the bar forward and across to the outside of the vehicle as far as it will go. Fit the M14 x 140 bolts up through the bottom of the outer most bracket and screw it into the welded nut.

DO NOT TIGHTEN. You may need to loosen the side wing brackets at the chassis to allow the bar to go forward so as it almost touches the mudflap.



- 25. Fit the spacer square tubes in between the centre two mount brackets. The longer tab on the square tube goes to the bottom. Fit the M10 x 150 bolts, fit up through the bottom, flat washer under bolt head, flat spring and nut to the top. Check that the tops of the bolts are not hitting the black plastic spacer panel with the cut-outs you did in step 13.
- 26. Tighten the M14 bolts first, then M10 bolts. Check the side wing is sitting approx. 3mm below the trim strip and approx. 10mm out from the plastic bumper at the mudflap end. Use a lever in the spare side brace hole then tighten the M10 bolt. Fit the other M10 bolt & nut. Fit the other two M10 x 30 bolts and nuts to the side braces and tighten. Refit sensor harness under bumper and re-connect sensors.



Fig 22



Fig 23

- 27. Looking down on top of the plastic centre step.Mark and drill through plastic and Kaymar bar two x M7 holes.
- 28. Fit the rubber spacer block in between the top of the Kaymar bar and the underneath of the plastic step section. Fit the M6 screw through the plastic and the block. Fit nyloc nut under the Kaymar bracket and tension the screw very slightly, so as not to crush the plastic but enough so the plastic can not be lifted upwards.
- 29. Connect the wiring for the lights in the bar. Fit the trailer plug.
  - round plug to the face of the Kaymar bar
  - flat plugs are fitted to the notch out in the base of right hand bar.
- 30. Re-fit the black bumper top to the plastic bumper.

### Bolt Kits for 200 Series

### BK20000 200 SERIES REAR BAR

- 8 ROOF BOLT PAN HEAD M6 X 20 (GU) (PLATES BLACK)
- 8 NUT FLANGE M6
- 4 BOLT ON WIRE M14 X 35 X 1.50 300 MM WIRE
- 2 BOLT M14 x 110 X 1.5
- 4 BOLT M10 X 30 X 1.5
- 2 BOLT M10 x 150 x 1.5
- 6 WASHER FLAT M14 X 32 HD
- 6 WASHER SPRING M14
- 12 WASHER FLAT M10 X 30 HD
- 6 WASHER SPRING M10
- 4 NUT M14 X 1.5
- 6 NUT M10 X 1.5
- 2 ROOF BOLT ZINC M6 X 40
- 2 NUT NYLOC M06
- 4 POP RIVET 3/16
- 2 RUBBER PACKER CENTRE HOLE 6MM
- 1 PINCH WELD 14 MM STRIP LENGTH 3020 MM

#### BK6121 WIRE

#### 200 SERIES WIRE KIT SUPPLIED WITH BAR

- 11 WIRE CONNECTOR FEMALE
- 11 WIRE CONNECTOR MALE
- 1 WIRE TRAILER 7 CORE 250 MM LENGTH
- 1 WIRE TRAILER 7 CORE 1600 MM LENGTH

#### BK6121 LIGHT

#### 200 SERIES LIGHT KIT

- 1 LIGHT LED STOP-TAIL-IND-REVERSE LHS
- 1 LIGHT LED STOP-TAIL-IND-REVERSE RHS
- 10 WIRE CONNECTOR FEMALE
- 10 WIRE CONNECTOR MALE
- 4 SCREW COUNTER SINK M5 X 15
- 4 NUT FLANGE M5
- 1 WIRE TRAILER 7 CORE 1600 MM LENGTH

