Kayman Fitting Instructions

Suitable fo	br
Toyota	Prado150
Year	
Туре	Wagon
Part	Rear Bar

Applicable to Part Numbers

K3720, K3720-S, K3720U, K3720U-S, K3730S, KITPRADO153, KITPRADO153-R-JCD, KITPRADO150, KITPRADO150-S, KITPRADO150-R-JCD, KITPRADO-150-S-R-JCD, KITPRADO151-S, KITPRADO151-S-R-JCD, KITPRADO152, KITPRADO152-R-JCD

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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.

Every effort is made to ensure instructions are as accurate as possible at the time of publishing however work should not be commenced until the document has been thoroughly read, measurements checked and all components in the package verified as complete. Kaymar has used reasonable care in preparing the information included in these documents, but makes no representations or warranties as to the completeness or accuracy of the information. Information is supplied upon the condition that the persons receiving the information will make their own determination as to its suitability for their purposes prior to use. Kaymar assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein. Kaymar reserves the right to make changes without further notice to any products to improve reliability, function or design.

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.

Suitable for PRADO 150

- Remove spare wheel cover, spare wheel and plastic surround from rear door. Unplug reversing camera and remove spare wheel bracket from door. (Only do this if a right hand carrier is to be fitted)
- If a left hand double jerry can or a left hand carrier is to be fitted remove original number plate housing. To do this you need to remove two door panels in rear trim, undo two screws one in handle and one in recess below rear windscreen.

Remove M6 bolt in door, pull door trim away from door gently to release plastic plugs. Fill any holes in body with grommets supplied.

 Remove plastic dust cover and undo four M6 nuts from behind number plate housing. Pull housing away from door to release plastic plugs. Remove rubber grommet in door and pull wiring through.



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4. Remove mud flaps, undo three screws from inside of wheel arch and two from under bumper. Take out plastic rivets in wheel arch and remove mud flap. Repeat other side. For a better finish, the coloured area of the mudflap can be painted black.



5. For models to October 2017

If vehicle is fitted with reversing sensors remove from bumper. Unplug sensors, one plug either side. Pull sensor out of housing then remove housing from bumper.

For facelift models from October 2017

(i) Unclip the sensors from the sensor housing

For best adhesion of the stick pads, lightly scuff the powder coat around the sensor hole with scotchbrite or steel wool.

(ii) Using the new sensor housings supplied, fit the two black sensor housings to the rear corners of the Kaymar bar, making sure they are centrally located in the hole.

NOTE: **The plugs on the sensors must face outwards** so as to avoid touching the bar pivots (see photos)

TIP - Fit the sensor into the housing first as this will make it easier to centre.

NOTE: **The red and blue sensor housings must be mounted upside down**. This will angle the sensor downward slightly. If this is not done the sensor will face upward and can detect the carriers giving a false reading.

(iii) Adhere the red sensor housing to the centre right hole in the bar and the blue sensor housing to the centre left hole, making sure they are horizontal and the correct way up.













- 6. Using a large flat head screw driver unclip step cover panel and remove. Undo the five M6 bolts then remove black plastic step.
- 7. With a felt tip pen mark bumper at mud flap end 198mm from top of bumper. using measurement from photo two make two small marks on bumper, this will give the location of template. With masking tape stick template to vehicle. Line up template so all three sections line up at the bottom and mark. Flip template over so LEFT reads back to front and repeat for right hand side.



- 8. Using a ruler join the two lines
- 9. From top of bumper make a mark 13mm down on both sides and join lines.
- 10. With bumper marked you can now remove it. Take out two plastic rivets from inside passenger side of bumper. Remove all bolts and associated brackets from under side of bumper. Starting at mud flaps pull bumper away from vehicle to unclip wings. Remove bumper.
- Fit gold wing support plates to either side of body using rivets supplied At this stage also install the wing brace on both sides using the supplied M8 fasteners

NOTE: If fitting to a Kakadu model see separate instructions for the wing brace







K6155_wing_brace_for_Prado150_Kakadu



- 12. Remove fuel tank cover and fit gold wing brace to chassis using M8 x 20 blots M8 spring washer and M8 flat washer. Three in bottom of chassis and two in the side. Leave loose. Repeat on other side. Gold bracket sit between chassis and fuel tank cover.
- 13. If vehicle has a reversing camera install camera loom. Unplug original wiring loom from inside of rear door. On right hand side of body cut a small hole in rubber grommet to allow wiring to be fed through. With longer length of loom feed up through body to existing door loom, run wiring through rubber conduit.

Cable tie camera loom to existing wiring in door and plug in camera loom.(Cable tie the rest of loom out of the way)



- 14. Take out polyurethane infill from under bumper; this will not be needed again. Sit bumper back on vehicle and clip wings back into place. Make sure bumper is back in original position.
- 15. Mark black plastic step you took off earlier following front edge of raised tread. Cut following line and clean cut edge. Re-clip back to bumper.





- From rear edge of bumper make a mark 50mm in, following lower sections of bumper mark up to black plastic step. Do this to both sides.
- 17. Using the step as a template trace along cut edge.



- 18. Remove black plastic step
- 19. With a 100mm angle grinder cut bumper following lines exactly, clean up edges using a Stanley knife.
- 20. Refit black plastic step and mud flaps using original hardware. Refit mud flaps using original hardware.



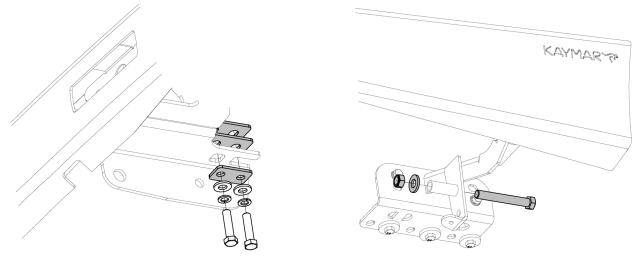
21. Splice in wiring supplied to trailer harness following wiring diagram Trailer harness

	Right hand side	Left hand side
LEFT INDICATOR	YELLOW	YELLOW
RIGHT INDICATOR	GREEN	GREEN
REVERSE	BLACK	BLACK
STOP	RED	RED
TAIL	BROWN	BROWN
EARTH	WHITE	WHITE

- 22. Drill a 7mm hole through mud flap and bumper secure using M6 pan head screw with M6 wizz nut supplied. Attach mud flap to wing brace using M6 pan head screw and M6 wizz nut.
- 23. Run a length of pinch weld along bottom edge of bumper cut, finish 40mm from end of cut in step. Repeat on other side
- 24. Remove tie down point from chassis.
- 25. Bolt the centre mount bracket to rear of chassis using M12 x 35 x 1.25 bolt M12 spring washer and M12 flat washer. **DO UP TIGHT.**



- 26. With another person lift kaymar bar on to vehicle being careful not to touch body. Fit two x M12 x 50 x 1.25, M12 spring washer and M12 flat washer through centre plate of bar into bottom of chassis. **LEAVE LOOSE**
- 27. Fit two M12 x 50 x 1.25 bolts, M12 spring washers and M12 flat washers to the bottom of either chassis arm making sure to use the washer plates as shown below.
 Install at least one shim on either side, if needed extra shims can be added to adjust the angle of the bar.
 Using the M12 x 90 Bolt, Flat Washer & Nyloc Nut, relocate the exhaust hanger rubber to the spacer tube welded onto the R/H Wing Brace as shown below to provide additional clearance to towbar.



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- 28. Fit two M12 x 35 x 1.75 bolts, M12 spring washers and M12 flat washers through the centre bracket fitted earlier into the captive nuts on bar. Tighten all bolts starting with bottom bolts.
- 29. Fit M10 x 30 x 1.5 bolt with M10 washer through side wing plate and gold wing brace using a wiz nut on other side. Sight along wings to see if there level with cut in bumper, If not lift up or lower wing till level then tighten bolts in wing. There should be a gap of 3-4mm between pinch weld and bar wing.
- 30. Connect lights to wiring. If a left hand Double jerry can or a carrier is to be fitted add an extra wire off TAIL (Brown) for number plate light. Make sure all joints are correctly crimped and then tapped over to seal.
- 31. If camera is being fitted bring the rest of camera loom though now.
- 32. Fit chequer plate using a thin bead of silicon along under side of chequer plate curved edge, place rubber strip along curved edge, place another thin bead of silicon on rubber strip, fit to bar using stainless steel hex head screws.
- 33. Fit carrier/s to bar, see carrier instructions.
- 34. If a carrier is being fitted. Run camera loom along bottom of carrier arm, and cable tie to cable tie mounts supplied.
- 35. Bolt black camera bracket to bottom of carrier arm using two M8 x 20 bolts, M8 spring and flat washer.
- 36. Fit camera to bracket using M6 pan head screw and M6 wizz nut.
- 37. Plug in camera.







NUMBER PLATE HOUSING INSTRUCTIONS

- 1. Take wiring out of original number plate housing including locking buttons and fit in Kaymar number plate housing.
- 2. Cut off number plate light plug. Using black wire in kit, extend white wire about 70mm.
- 3. Remove M6 bolts from new number plate light and replace with stainless steel M6 hex head screws. Bolt number plate light to Kaymar housing.
- Feed positive through to light and connect with female terminal.
 Using an eye terminal connect earth (black) stainless steel bolt at the back of housing.
- 5. Run a length of pinch weld along edge of housing and a short length across handle cover. Fit to door using M6 coach bolts and M6 wizz nuts. Make sure housing is straight then tighten.





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BK3720 PRADO 150 REAR BAR

QUANTITY DESCRIPTION

- 6 BOLT M12 X 50 X 1.25 FINE THREAD
- 4 BOLT M12 X 35 X 1.25 FINE THREAD
- 2 BOLT M12 X 35 X 1.75
- 4 BOLT M10 X 30 X 1.5
- 6 ROOF BOLT PAN HEAD M6 X 20 (GU) (PLATES BLACK)
- 14 WASHER FLAT M12 X 30 HD
- 14 WASHER SPRING M12
- 4 WASHER FLAT M10 X 20
- 2 NUT M12 X 1.75
- 4 NUT FLANGE M10
- 6 NUT FLANGE M6
- 10 BOLT M8 X 20 X 1.25
- 10 WASHER FLAT M8 X 17
- 10 WASHER SPRING M8
- 4 POP RIVET 3/16
- 1 WIRE TRAILER 7 CORE 1200 MM LENGTH
- 10 WIRE CONNECTOR MALE
- 10 WIRE CONNECTOR FEMALE
- 1 PINCH WELD 14 MM STRIP LENGTH 1500 MM PACKER
- 2 DOUBLE SLOT 8 MM 75 X 48
- 4 RUBBER GROMMET 1/2
- 1 CENTRE MOUNTING PLATE P150
- 2 BUMPER SUPPORT FOR PRADO 150 REAR BAR FITTING
- 1 TEMPLATE CARDBOARD CUTTING PRADO 150







rubber_grommet_half_inch



centre_mounting_plate



bumper_support_for_Prado150_rear_bar_fitting



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K6155_wing_brace_for_Prado150_Kakadu

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BK3720 PRADO 150 REAR BAR







rubber_grommet_half_inch



template_cardboard_cutting_PRADO 150



centre_mounting_plate



bumper_support_for_Prado150_rear_bar_fitting

