PART No: 03162RW KIA SPORTAGE QL SERIES

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT ALL INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED



Installation Time: Approx 60 Mins

Towbar Installation Instructions Tov

Towbar capacity

KIA SPORTAGE QL SERIES

Part Number 03162RW

Max Towing Braked 1900 kg Max Towing Unbraked 750 kg Max Static Ball Load 100 kg



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Warning:

- 1. Do not, drill, cut, weld or otherwise modify the towbar.
- 2. If you are using electric welding on a motor vehicle, <u>always</u> check that the vehicle is not equipped with electronic engine or instrument management equipment. Failure to do so could <u>destroy</u> any onboard computers. If in doubt, check with the vehicle's manufacturer.
- 3. If TBM is used in inverted position tow ball may make contact with rear tailgate when lowered, which could cause damage.

General:

- 1. Ensure all hardware items have been included refer to assembly diagram.
- 2. It is recommended that the instructions are read through and completely understood before making any attempt to fit this product.
- 3. Be wary of any changes to vehicle designs or other accessories that may conflict with the installation of this product.
- 4. Before drilling ensure that the area is clear of fuel, electrical & other components.
- 5. All holes drilled into the body panels shall have all burrs & swarf removed then coated with a suitable rust preventative paint.
- 6. The high tensile fasteners supplied with this product were used to achieve the specified rating. If replacement is required ensure that fasteners of the same rating & quality are used. Contact an authorised **Hayman Reese** dealer if further information is required.
- 7. Ensure that all hardware is fastened to torque list below check fasteners on regular basis.
- 8. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door. (See diagram below).
- Hayman Reese recommends that you check your tow ball to ensure that it complies with the Australian standards AS 4177.2.
- 10. **PLEASE NOTE**: It is advised to remove your LUG or TBM when not actually towing so as to produce a clear view of the vehicles registration plate if obscured, and to also provide maximum available departure angle.
- 11. Pull Pin must be fit in down position.

Tow bar Maintenance and Care.

Hayman Reese recommends that bolt torque's, as listed below, are routinely and regularly inspected and checked for correct tension. Replace any worn or defective parts.

We recommended to remove Tow Ball Mounts (TBM's, tongues or lugs) when not being used for any considerable length of time.

So as to avoid injury, when not towing it is suggested that the tongue, Pull Pin and R-clip are removed then stored in a safe, clean and dry place, away from excessive moisture.

Hitch Pull Pins and spring "R" clips are regularly checked for proper installation. Replace any worn or defective parts.



For towing capacity details please refer to vehicle owner's manual or to the manufacturer. Overloading can void your warranties.

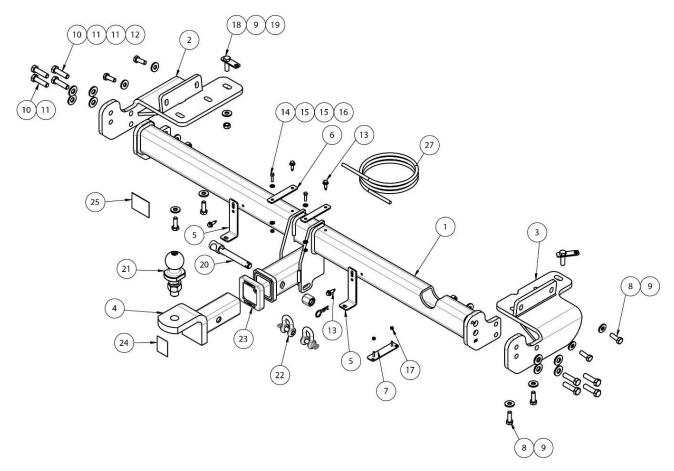
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ITEM	DESCRIPTION	
1	WELDED CENTRE ASSEMBLY	1
2	SIDEARM ASSY EXTENSION LH	1
3	SIDEARM ASSY EXTENSION RH	1
4	TRAILER BALL MOUNT	1
5	BUMPER TAB BRACKET	2
6	SMART KEY ANTENNA BRACKET	2
7	PLUG BRACKET	1
8	SET SCREW HEX HD M10X30X1.25P	8
9	WASHER PLAIN M10 X 25 X 3	10
10	SET SCREW HEX HD M12X45X1.25P	8
11	WASHER FLAT M12	12
12	NUT HEX HD M12 X 1.25P	4
13	TEK SCREW 14-20 HEX HD 22mm	4
14	SET SCREW HEX HD M5x20x0.8P	2

ITEM	DESCRIPTION	
15	WASHER FLAT M6X12.5X1.2	4
16	NUT NYLON INS LOCK M5X0.8P	2
17	NUT NYLON LOCK HEX HD M4X0.7P	2
18	T BOLT ASSEMBLY	2
19	HEX NUT M10x1.5P	2
20	SMART PIN ASSY CLASS 4 – GOLD	1
21	TOWBALL 50MM	1
22	"D" SHACKLE 10mm	2
23	HITCH BOX COLLAR COVER	1
24	HAYMAN REESE LOGO STICKER	1
25	COMPLIANCE LABEL	1
26	LOAD RATING LABEL	1
27	WIRING LOOM	1

PART No: 03162RW KIA SPORTAGE QL SERIES

INSTALLATION INSTRUCTIONS

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1.	Remove plastic trim cover adjacent to tail light assembly. Repeat for opposite side of vehicle.	
2.	Remove 2x Screws securing taillights to vehicle. Remove tail light assembly. Repeat for opposite side of vehicle.	
3.	Remove 2x push rivets from taillight cavity. Repeat for opposite side of vehicle.	

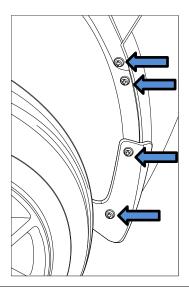
PART No: 03162RW KIA SPORTAGE QL SERIES

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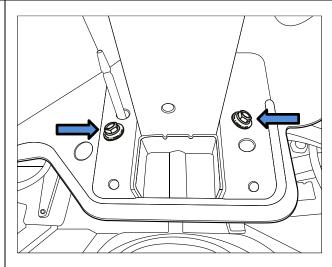
4. Remove 4x Screws within rear wheel arch.

Repeat for opposite side of vehicle.



5. Remove 2x Screws adjacent to chassis rail, securing rear impact beam to rear the panel.

Repeat for opposite side of vehicle.



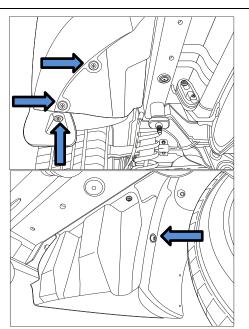
6. Remove 3x push rivets under vehicle behind rear wheel arch and 1x push rivet from within rear wheel arch.

Repeat for opposite side of vehicle.

 Remove plastic undertray from behind rear wheel arch.

Repeat for opposite side of vehicle.

8. Carefully unclip and remove rear bumper; disconnecting any applicable wiring looms.

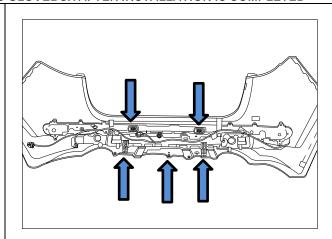


PART No: 03162RW KIA SPORTAGE QL SERIES

INSTALLATION INSTRUCTIONS

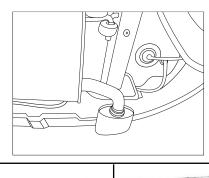
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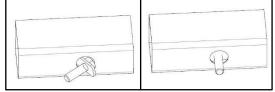
- 9. Remove 3x push rivets securing impact beam bumper tabs to bumper.
- 10. Remove 2x clips securing top of impact beam to bumper.
- 11. Where applicable, release smart key antenna from impact beam.
- 12. Detach wiring from impact beam and remove and discard impact beam from rear bumper.



- 13. Remove the rubber seal located on the underside of the chassis rail to expose the hole.
- 14. Insert the T-bolt assembly into the chassis hole and position it over the hole

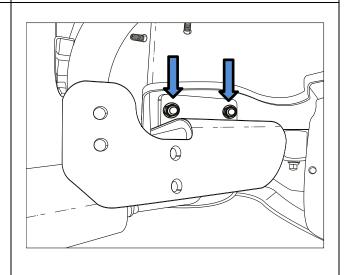
Repeat for other side.





15. Loosely secure sidearm to side face of chassis rail using 2x M10 Screws, complete with 1x flat washer per Screw.

Repeat for opposite side of vehicle.



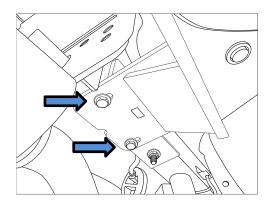
PART No: 03162RW KIA SPORTAGE QL SERIES

INSTALLATION INSTRUCTIONS

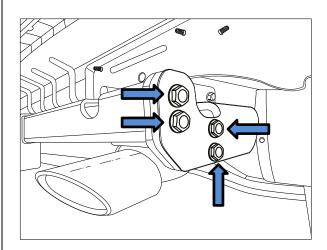
PLEASE ENSURE THAT ALL INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT PLACE THESE INSTRUCTIONS IN THE VEHICLES'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

16. Loosely secure sidearm to underside of chassis rail using 2x M10 Screws and 1 x M10 nut complete with 1 x washer., complete with 1x flat washer per Screw

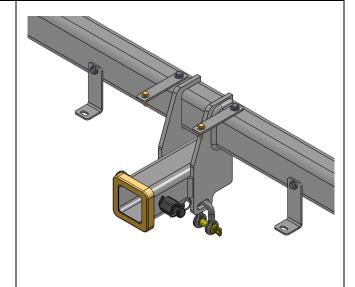
Repeat for opposite side of vehicle.



- 17. Loosely secure welded assembly to sidearms using 4x M12 Screws per side arm, complete with 2x flat washer and 1x M12 Nut per 2 of the Screws, and 1x flat washer per the remaining 2 Screws.
- 18. Tighten all screws to torque listed on page 2 of this document.



- Where required, secure smart key antenna brackets to holes in top of towbar using Tek Screws.
- 20. Secure bumper tab brackets in holes on rear face of towbar using Tek Screws.



PART No: 03162RW KIA SPORTAGE QL SERIES

INSTALLATION INSTRUCTIONS

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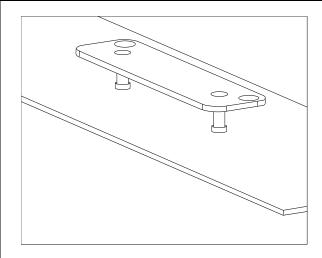
21. Identify centre of bumper and create bumper cut as per diagram below.				
90	● 90mm			
Ø20mm	CENTRELINE OF BUMPER			
BOTTOM ED	GE OF BUMPER			
	DRAWING NOT TO SCALE			

PART No: 03162RW KIA SPORTAGE QL SERIES

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22. Mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket. Feed bracket threads through drilled holes prior to reinstalling bumper.



- 23. Refit rear bumper by following steps 1 to 4 and 6 to 8 in reverse order.
- 24. Where applicable, secure smart key antenna to smart key antenna brackets.
- 25. Secure the plug bracket to the plug bracket support using the 2 x M4 Nyloc.
- 26. Secure loose wiring to towbar using cable ties (not supplied).

PART No: 101469-WL (03162 RW) KIA SPORTAGE QL

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT

Wiring Loom Installation Instructions

KIA SPORTAGE QL

Part No: 101469-WL ECU Required: 04826

Power Harness Supplied: 04825

Tail Harness Length Required: 1200mm

Wiring Loom Installation Time: Approx. 30 minutes

Issue Date 14-06-16 Page 1 Part No: 101469-WL



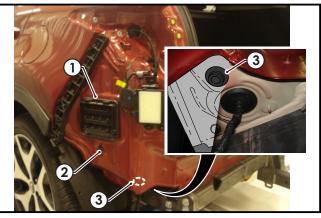
PART No: 101469-WL (03162 RW) KIA SPORTAGE QL

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT

- 1. At the vehicle LHS rear quarter, remove the vent (1), grommet underneath the vent (2) and the LHS rear quarter underside grommet (3).
- 2. Drill out the two grommet holes (2+3) to Ø30mm. Ensure the area being drilled into is clear of all obstructions before drilling.

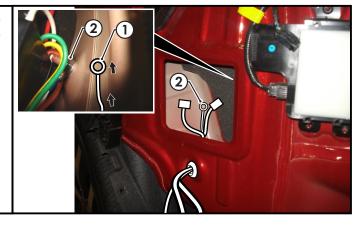
File down any rough edges and apply rust inhibitor (not supplied) after drilling.



3. From inside of the vent cavity, route the trailer patch (P/No: 101469-WL) (1) out through the grommet (2) located under the vent. Note: The ECU connector, ground ring terminal and tail harness connector stay inside the vent cavity. Refer to the trailer patch harness grommet orientation.



 Inside the LHS rear quarter vent cavity, secure the trailer patch ground ring terminal (1) to the vehicle grounding point (2).



Issue Date 14-06-16 Page 2 Part No: 101469-WL

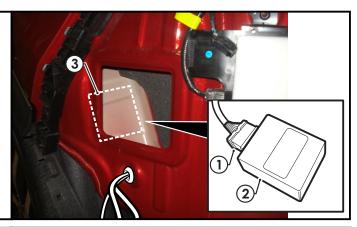


PART No: 101469-WL (03162 RW) KIA SPORTAGE QL

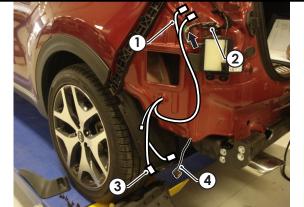
INSTALLATION INSTRUCTIONS

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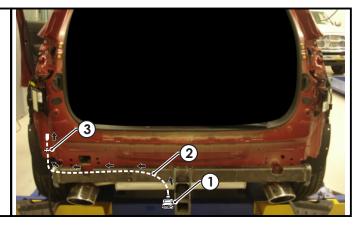
5. Connect the trailer patch connector (1) to the ECU (P/No: 04826) (2). Locate a suitable area on the sheet metal (3) where the ECU will be mounted and clean with an alcohol wipe (not supplied). Remove the backing from the back of the ECU and mount the ECU (2) onto the sheet metal area (3). Ensure the ECU is mounted with the connector pointing downwards.



- **6.** Connect the trailer patch connectors (1) in between the vehicle LHS 4-way connectors (2).
- 7. Connect the trailer patch 12-way connector (3) to the vehicle harness mating 12-way connector (4).



- **8.** At the rear exterior of the vehicle, mount the tail harness socket (1) to the towbar mounting bracket using M4 fasteners (not supplied).
- 9. Route the tail harness (tail length: 1200mm) (2) across the LHS and up into the drilled out hole (3). Adjust the trailer patch harness grommet so that it is seated correctly and cable tie (not supplied) in place.



Issue Date 14-06-16 Page 3 Part No: 101469-WL

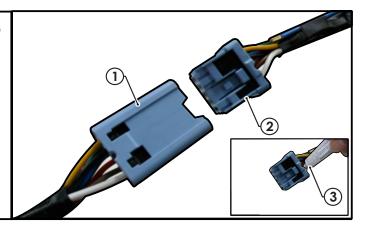


PART No: 101469-WL (03162 RW) KIA SPORTAGE QL

INSTALLATION INSTRUCTIONS

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- **10.** Connect the tail harness 8-way connector (1) to the trailer patch mating 8-way connector (2).
- **11.** Waterproof the connectors by applying electrical grease or silicone (3) to the back of each connector.



- 12. In the engine bay, route the power harness (P/No: 04825) (1) from the battery area and down the engine bay to the underside of the vehicle. Do not connect the power harness ring terminal to the battery at this point.
- 13. Route the power harness (1) along the LHS chassis rail towards the LHS rear quarter of the vehicle. Connect the power harness 1-way connector to the trailer patch 1-way mating connector. Keep harness routing clear of all sharp objects, moving parts or areas of extreme heat. Secure the harness with cable ties (not supplied) after routing.



14. In the engine bay, secure the power harness ring terminal (1) to the battery positive terminal (2).



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PART No: 101469-WL (03162 RW) KIA SPORTAGE QL

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT

- 15. The RPA can be disabled via a switch (1) on the dash.
- **16.** Test the trailer patch function using a light board or multi-meter.
- 17. Secure all harnesses using cable ties (not supplied).
- **18.** Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
- **19.** Place the fitting instructions in the glove box after fitment.



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FITTING INSTRUCTIONS Smart Pin (55070BL)

- These fitting instructions are supplied to ensure understanding of how the SMART PIN should be fitted and used correctly.
- Once installed, we recommend <u>ALL</u> instructions are kept and placed in the vehicle glove box.

NOTE: Routine maintenance and inspection of the towbar & SMART PIN is required. Regularly inspect for wear and check the tightness of the SMART PIN NUT. Follow instructions below to retighten the nut when necessary.

*Do not tow with your vehicle if the R CLIP or the SMART PIN NUT is loose or missing. Replacement parts are available from your Hayman Reese Distributor.

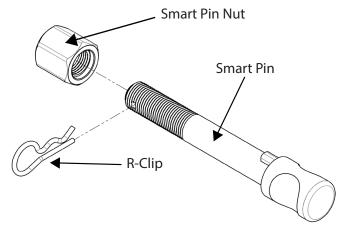
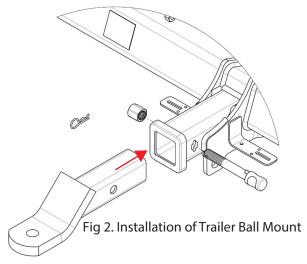
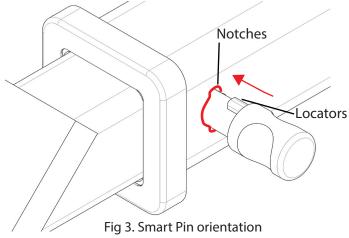


Fig 1. Smart Pin assembly

STEP 1

Insert Trailer Ball Mount (TBM) into towbar HITCHBOX, aligning hole in TBM SHANK with hole in HITCHBOX (Fig. 2).





STEP 2

Insert SMART PIN through hole in HITCHBOX and hole in TBM SHANK; ensure the LOCATORS are inserted into the NOTCHES in the HITCHBOX (Fig. 3).

STEP 3

Screw SMART PIN NUT onto SMART PIN; tighten SMART PIN NUT until finger tight, ensuring TBM is restrained from movement.

STEP 4

Tighten SMART PIN NUT by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig 4).



Install SMART PIN R CLIP through the hole on the SMART PIN (Fig. 1).

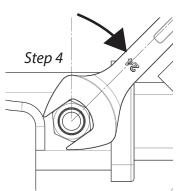


Fig 4. Tightening of Smart Pin Nut

