

PART NUMBER 03244RW

KIA STINGER CK CLASS 4



#### **PRODUCT DETAILS:**

**Part Number:** 03244RW **Maximum Towing Braked:** 1500 kg **ECU Number:** 04826 **Maximum Towing Unbraked:** 750 kg **Maximum Static Ball Load: Tail Harness Length Required:** 400 mm 75 kg **TBM/Lug Part Number:** 21126

#### FITTING DETAILS:

**Wiring Part Number:** 

Towbar Installation Time: 80 Mins. Vehicle Coding Required: NO
Wiring Installation Time: 45 Mins. RPA Disable/Other: YES
Total Installation Time: 125 Mins. Notes:

Bumper Cut Required: Yes RPA Disable: Manually by

102011-WL

- RPA Disable: Manually by switch near gear shift;
   Auto RPA Disable by using tail 04936 and wiring into patch loom as per fitting instruction.
- Electric Brake Input Location: Blue wire near vehicle breakout

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CORRECT

INCORRECT

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Figure 1

Figure 2

#### ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT.



#### **BEFORE YOU START:**

Hayman Reese recommends that instructions are read completely prior to fitment. Check all hardware items have been included refer to assembly diagram. Please ensure this towbar is only fitted to vehicle models as per Hayman Reese application guide (www.haymanreese.com.au).

#### **Bumper Cuts**



Vehicle and bumper variations can and do occur during vehicle manufacture after initial towbar design. Fitment of towbar to vehicle and accuracy of bumper cut must be assessed prior to any bumper modifications made. Incorrect bumper cuts are not covered under Hayman Reese warranty.

#### NOTE: Bumper cuts need to be approached with care, refer to notes below.

- Bumper centreline where the centreline of the bumper needs to be determined, the installer
  must assess centre point by measurement of bumper width or determining two symmetrical
  reference points to give centreline.
- Bumper edge To assist with accurate bumper cut measurement, reference to the start of the bumper edge is now being commonly used.
  - Measure from bottom edge along bumper and around corner to the 70 mm point (Figure 1).
  - Do not measure from visible bumper front of corner, upwards (Figure 2).

#### **Drilling**

- For any required drilling during installation, ensure that the area is clear of fuel, electrical & other components that may be damaged.
- All holes drilled into the body panels shall have all burrs & swarf removed then coated with a suitable rust preventative paint. **Bolts/Fasteners**
- Ensure that all hardware is fastened to correct torque as specified in this fitting instruction.
- All fasteners supplied with this product are used to achieve a specified clamp loading. If replacement is required ensure that fasteners of the same grade and class are used.



NOTE: Achieving correct torque is critical to proper installation and responsibility of the installer. Towbar failures attributed to tension issues from over tightening or under tightening are not covered by Hayman Reese warranty.

#### **Product Labels**

- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.
- b. Powertrain Control Module (PCM)/Body Control Module (BCM) upgrade warning label will be provided in towbar kit for vehicles as required. Affix warning label in door and owner's handbook.





#### **WARNING:**

Do not, drill, cut, weld or otherwise modify the towbar.

FOR TOWING PURPOSES ONLY - This towbar is designed and tested by Hayman Reese to adhere to ADR 62/02 which provides only for the expected load demands of towing.

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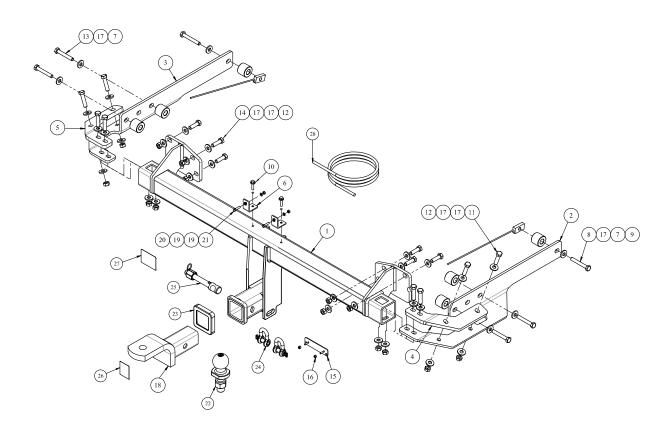


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### 1

### **TOWBAR ASSEMBLY DIAGRAM**



ITEM	DESCRIPTION	QTY
1	KIA STINGER CK CL4	1
2	SIDE ARM RHS	1
3	SIDE ARM LHS	1
4	SIDE PLATE RHS	1
5	SIDE PLATE LHS	1
6	SENSOR BRACKET	2
7	SPACER	6
8	BOLT HEX HD M10 X 70 X 1.5P G8.8	2
9	T PLATE M10 1.5P & WIRE W300	2
10	TEK SCREW 14-20 HEX HD 22mm	2
11	BOLT HEX HD M10 X 45 X 1.5P	8
12	HEX NUT M10x1.5	14
13	M10-1.25X60 BOLT	4
14	BOLT M10-1.50 x 35 10.9	6

ITEM	DESCRIPTION	QTY
15	PLUG BRACKET	1
16	NUT NYLON LOCK HEX HD M4X0.7P G8	2
17	WASHER PLAIN M10 X 25 X 3	34
18	TRAILER BALL MOUNT	1
19	WASHER PLAIN M5 X 10 X 1	4
20	NUT NYLON INS LOCKHEX HD M5X0.8P G8	2
21	SET SCREW HEX HD M5x20x0.8P	2
22	HR TOWBALL	1
23	HITCH BOX COLLAR COVER	1
24	10mm "D" SHACKLE	2
25	ANTI-RATTLE PULL PIN ASSY GOLD	1
26	H.R STICKER	1
27	ACRYLIC COMPLIANCE LABEL	1
28	WIRING LOOM	1

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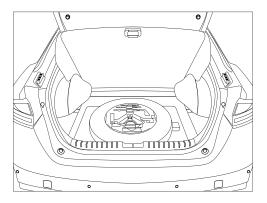
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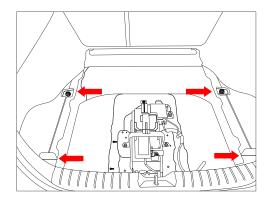
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1. Open tailgate and remove parcel shelf, carpet, toolkit and spare wheel.



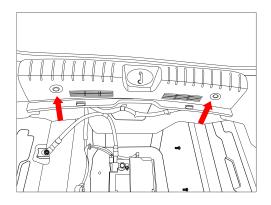
2. Remove 2 x Screws from the LH side carpet.

Repeat for other side



3. Remove 2 x Clips from the plastic rear panel.

Pull upwards and remove rear panel from vehicle.



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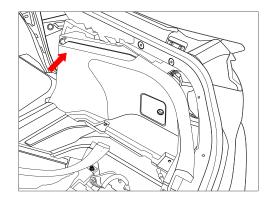


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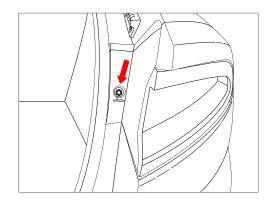
4. Unclip cap from side panel and remove the 1 x mounting screw. Dislodge side panel by pulling inwards to expose the rear impact beam fasteners in the boot compartment.

Repeat for other side.



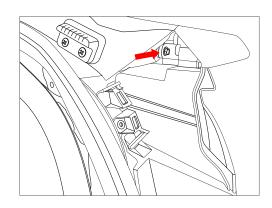
5. Unclip cap on taillight cover and remove 1 x screw. Remove cover.

Repeat for other side.



- 6. Remove 1 x screw securing the taillight assembly.
- 7. Pull taillight rearwards and remove assembly, ensuring to unclip the wiring harness.

Repeat for other side.



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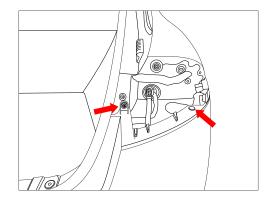


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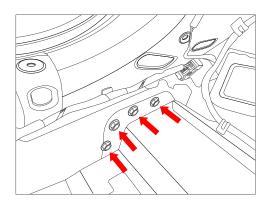
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8. Remove 1 x screw and 1 x scrivet from the taillight cavity.

Repeat for other side.

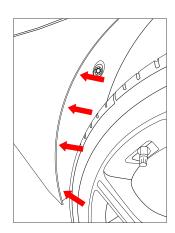


9. From inside the boot compartment remove 4 x bolts on the LHS and 3 x Bolts on the RHS securing the impact beam to vehicle and discard. (LHS shown).



10. In wheel arch, remove 4 x screws.

Repeat for other side.



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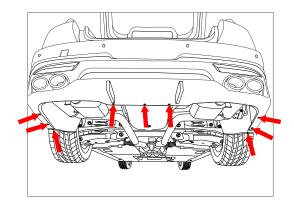


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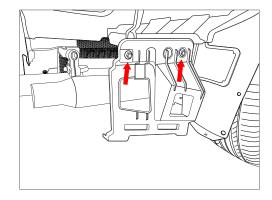
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- 11. Under vehicle along the bumper, remove 9 x scrivets.
- 12. Peel away from sides and remove bumper from vehicle.

Ensure to unclip all electrical connections to sensors and harnesses.

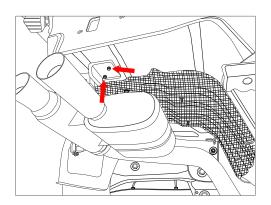


Remove plastic support panel secured with 2 x bolts
 Repeat for other side.



- 14. Remove 2 x nuts securing the exhaust hanger bracket and lower the exhaust.
- 15. Remove the heat shield secured with 6 x nuts.

Repeat for other side.



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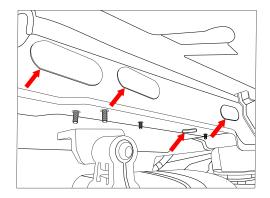
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16. Remove rubber coverings to expose the 3 x mounting hole positions on the side of the chassis rail.

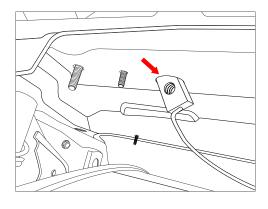
Remove the rubber grommet from under the chassis rail.

Repeat for other side.

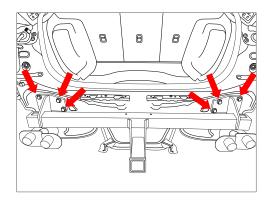


17. Feed 1 x M10 Nut plate on wire through hole from under the chassis and position it for the forward most mounting hole on the side of the chassis.

Repeat for other side.



18. Lift crosstube to vehicle and loosely secure to the rear panel with 3 x M10 bolts per side complete with 2 x washers and 1 x nut per bolt.



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19. Loosely secure the side arm to the chassis rail with: Front mount: M10 x 70 x 1.5 complete with 1 x bush spacer, 1 x washer and 1x nut plate on wire (fed through in step 17).

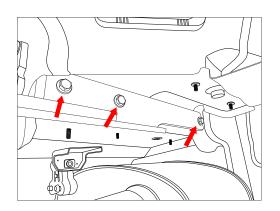
Rear 2 mounts: M10 x 60 x 1.25 complete with 1 x bush spacer and 1 x washer per bolt.

#### NOTE:

Ensure that the bush spacers are placed between the chassis rail and the side arm.

The side arm must also be positioned inside the crosstube at this step.

Repeat for other side.



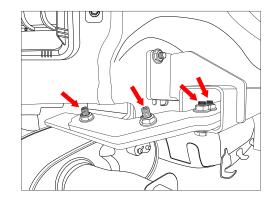
20. Loosely secure the side plate to the top of the side arm and crosstube with 4 x M10 bolts complete with 2 x washers and 1 x nut per bolt.

Repeat for other side.

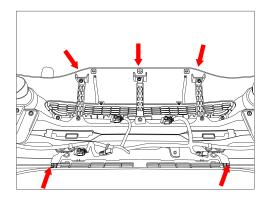
Position the towbar and tighten all fasteners.

Torque: M10 GR8.8 : 48Nm (side arms)

M10 GR10.9 : 62Nm



- 21. Remove 3 x Scrivets securing impact beam bumper tabs to bumper.
- 22. Remove 2 x clips securing top of impact beam to bumper.
- 23. Where applicable, remove smart key sensor from impact beam.
- 24. Detach wiring from impact beam and remove and discard impact beam from rear bumper.



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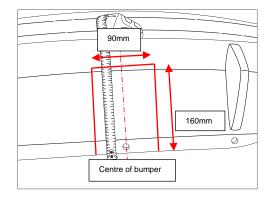


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25. On outside of bumper, determine the centre, mark off and cut out 90mm wide x 160 mm long measured from the bottom edge of the bumper.

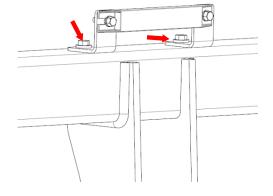
Deburr all sharp edges.



26. Loosely secure the sensor brackets to the cross tube with 2 x Tekscrews.

Attach smart key sensor to the sensor brackets with 2 x M5 bolts complete with 2 x Washers and  $1 \times Nut$ .

Tighten the brackets in position.



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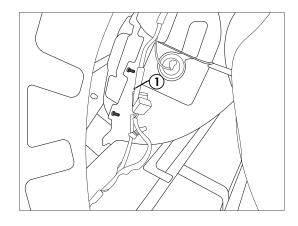
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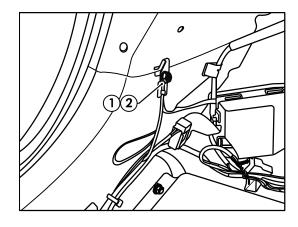


Due to possible vehicle variations, always confirm any noted vehicle colour wires with a multi-meter to ensure the correct function is identified before soldering or scotch locking. For vehicle wires denoted with two colours (example; RED/GREEN) the first colour will always be the main wire colour while the second colour is the thinner trace colour on the wire.

- 27. Locate the vehicle trailer wire harness pre-wire connector (1) on LHS.
- 28. Connect the pre-wire connector to the trailer patch (102011-WL).
- 29. Secure harness to the existing loom using supplied Cable Ties



30. Connect the ground wire ring terminal (1) to the vehicle earthing point (2).



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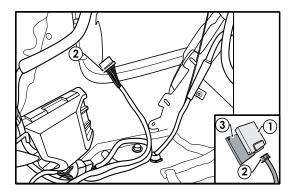


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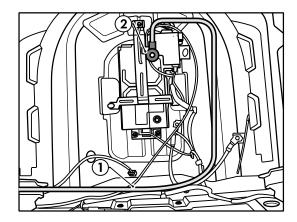
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- 31. Using an alcohol wipe, clean the LHS inner sheet metal area and the underside of the ECU (04836) (1).
- 32. Connect the trailer patch 12-way connector (2) to the ECU (1).
- 33. Apply double sided tape (3) to the ECU (1) and secure it to the vehicle sheet metal.

Note: Mount the ECU, ensuring the connector is orientated downwards.

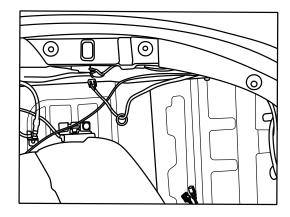


- 34. Route the power wire (1) towards the vehicle's battery.
- 35. Connect the ring terminal (2) to the vehicle positive stud.



- 36. Using a 30mm step drill bit, drill a Ø30mm hole in a suitable location to enable the harness to be routed through to the towbar.
- 37. Route the patch harness through 30mm grommet hole and seat grommet in the hole.

Note: Ensure grommet is seated correctly and makes a good seal.



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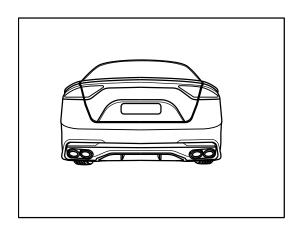


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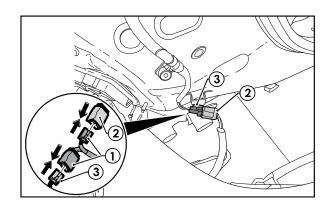
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- 38. With the rear bumper removed, secure tail harness to towbar.
- 39. Route tail harness up towards blue connector.

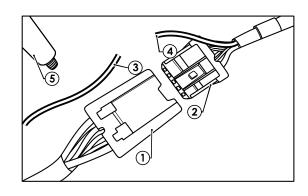
Note: Keep harness routing clear of all sharp edges, moving parts and places of extreme heat.



40. For RPA disable, patch in the RPA disable patch harness (1) in between the vehicle connector (2) and bumper connectors (3) on the LHS below the tail light.



- 41. Connect the tail harness (tail length 400mm) 8-way connector (1) to the trailer patch 8-way mating connector (2).
- 42. Cut-off, crimp the tail harness GREY and GREY/BLACK wires (3) to the RPA patch matching GREY and GREY/BLACK wires (4).
- 43. Apply silicone grease (not supplied) (5) to waterproof connector.
- 44. Secure all harness using supplied Cable Ties.



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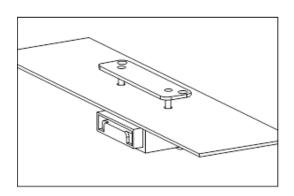
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45. Test the trailer harness using a light board or multimeter.

Reconnect smart key sensor and cable tie (not provided) loose wiring removed from the impact beam to crosstube.

- 46. Refit removed components and bumper.
- 47. Determine an appropriate position for the plug bracket. Mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket.
- 48. Place the instructions in the glove box after fitment.





### **CUSTOMER INFORMATION**

PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION

THANK YOU FOR PURCHASING HAYMAN REESE.
WITH CORRECT MAINTENANCE AND CARE THIS PRODUCT WILL PROVIDE A
LIFETIME OF TROUBLE-FREE OPERATION.



### **TOWBAR MAINTENANCE AND CARE:**

- 1. Hayman Reese recommend that the towbar LUG or TBM (tow ball Mount) Pull Pin and R-clip are removed and stored when not in use. Removal of LUG or TBM (tow ball mount) is advisable when not in use to assist with any of the following.
  - Ensure rear number plate is not obscured.
  - Allow maximum available departure angle and prevent any potential interference.
  - Prevent possible interference with vehicles reverse sensors or camera detecting a tow ball mount as an obstruction during reversing.
  - Removes towball mount as an obstruction for when moving around the rear of the vehicle.
- 2. Hayman Reese recommends routine inspection of your towbar to ensure trouble free towing.
  - Bolt security and tension should be regularly inspected and checked for correct tension. Replace
    any worn or defective parts with suitable grade & class fasteners. Inspection should be requested
    to coincide with vehicle major services.
- 3. It is the owner's responsibility to ensure towing and down ball weight capacities of the towing vehicle are not exceeded.
  - Towing and down ball weights allowable may differ according to model variations. Please refer to owner's manual or vehicle dealer to confirm exact rating for your vehicle model variant.
  - It is not uncommon for the vehicle tow rating to differ from the towbar rating. When this occurs, the lesser rating must be adhered to.
  - For vehicles fitted with enhanced vehicle functions that may be altered/changed when towing i.e
     Trailer sway mitigation, blind spot detection, adaptive cruise control etc. Please consult owner's manual to understand changes enabled when towing and after towing.



#### **WARRANTY INFORMATION:**

Hayman Reese Towbars are covered by a Lifetime Warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For further details please visit www.haymanreese.com.au/warranty or contact customer service on 1800 812 017 or info@haymanreese.com.au.

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### **HAYMAN REESE SMART PIN**

Your Hayman Reese towbar is equipped with Smart Pin technology to help reduce towbar tongue rattle in most driving conditions. Please ensure below instructions are understood and routine maintenance is carried out to ensure best towing experience.



Regularly inspect for wear and check the tightness of the Smart Pin Nut. Follow instructions below to retighten the nut as necessary when movement and noise in the tow ball mount is noted.

Before towing, ensure R-Clip is properly installed and Smart pin nut is installed and tensioned.
 Replacement parts are available from your Hayman Reese Distributor.

### **TOWBALL MOUNT REMOVAL/INSTALLATION**

#### STEP 1

Insert Trailer Ball Mount (TBM) (a) into towbar hitchbox (b), aligning hole in TBM shank (c) with hole in hitchbox (d) (Fig. 1)

#### STEP 2

Insert Smart Pin (e) through hole in hitchbox and hole in TBM shank (g); ensure the locators are inserted into the notches in the hitchbox (Fig. 2)

#### STEP 3

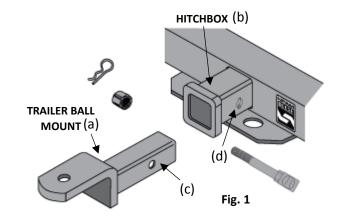
Screw Smart Pin Nut (f) onto Smart Pin (g); tighten Smart Pin Nut until finger tight, ensuring TBM is restrained from up and down movement.

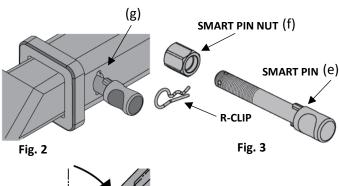
#### STEP 4

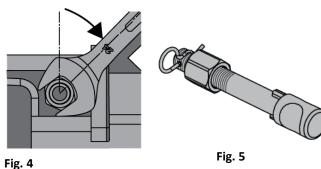
Tighten Smart Pin Nut by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig. 4).

#### STEP 5

Install Smart Pin R-Clip through the hole that provides best clearance or easiest access. (Fig. 5)







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