

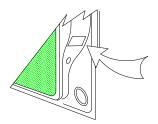
PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

### **WARNING:**

- 1. Do not, drill, cut, weld or otherwise modify the tow bar.
- 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. 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 **Trailboss** dealer if further information is required.
- 4. 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. For vehicles that require the bumper to be cut. Ensure cut out area is in correct position on the vehicle prior to cutting the bumper.
- 7. 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 authorized **Trailboss** dealer if further information is required.
- 8. Ensure that all hardware is fastened to torque list below check fasteners on regular basis.
- 9. Tow bar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door. (See diagram below).
- 10. Trailboss recommends that you check your tow ball to ensure that it complies with the Australian standards AS 4177.2.
- 11. **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



Place load rating sticker inside driver's door here

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

RECOMMENDED ASSEMBLY TORQUE LISTING Diameter Grade 8.8 Bolt				
	9.5 Nm			
M8	21.7 Nm			
M10	43.4 Nm			
M12 M14	77.3Nm 146 Nm			
M16	189.8 Nm			

### Tow bar Maintenance and Care.

Trailboss 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.

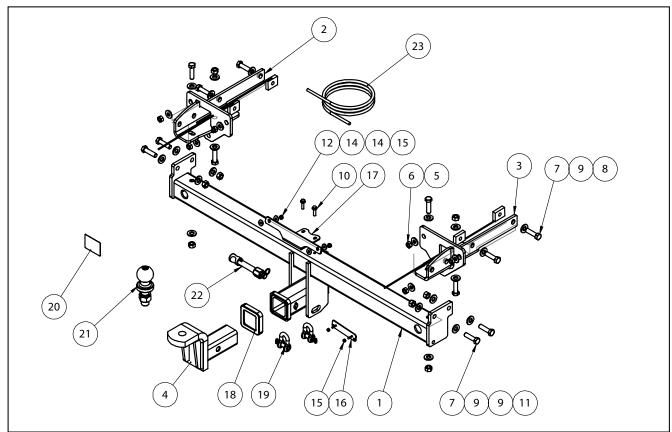
### **Cequent Customer Service**

Ph: 1800 812 017 Fax: 03 9898 3299 Email: info@cequent.com.au

Post: PO Box 4050, Dandenong South VIC 3175



PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED



ITEM	DESCRIPTION	QTY
1	HOLDEN ASTRA BK CL4 WELDED ASSY	1
2	SIDE ARM ASSY LH	1
3	SIDE ARM ASSY RH	1
4	ТВМ	1
5	WASHER FT M10 X 25.4 X 3	6
6	HEX NUT M10x1.5	6
7	SET SCREW M12 - 1.25 x 45mm	12
8	PLATEM12X1.25-40X32MM-300MM-WIRE	4
9	WASHER PLAIN 1/2X1-1/8X16G	20
10	TEK SCREW 14-20 HEX HD 22mm	2
11	NUT HEX HD M12 X 1.25P G8	8
12	SET SCREW M6x16 PC8.8	2

ITEM	DESCRIPTION	QTY
13	NYLOC NUT M6-1.00 Z/P	2
14	WASHER FLAT M6x18x1.5	4
15	NUT NYLOC M4-0.7 Z/P	2
16	PLUG BRACKET	1
17	BUMPER TAB	1
18	HITCH BOX COLLAR COVER	1
19	10mm "D" SHACKLE	2
20	ACRYLIC COMPLIANCE LABEL	1
21	50mm TOWBALL	1
22	ANTI-RATTLEPULLPIN ASSY SILVER	1
23	WIRING LOOM	1

### **Cequent Customer Service**



## PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

- 1. Open rear door to expose covers.
- 2. Remove the LH Side cover to gain access to the rear tail light assembly.

Repeat for RH side.



 In the LH cavity, locate and undo the plastic fastener securing the tail light assembly.
 On tail light, disconnect the wiring harness plug (slide the red clip to unlock and then press inwards to unplug) and remove tail light.

Repeat for RH side.



4. In wheel arch, remove the 4 x Torx and 1 x screw securing the bumper.

Repeat for other side.

The view is looking down and rearwards from the top of the tyre.



**Cequent Customer Service** 



## PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

5. Remove the registration plate to expose 2 x screws.

Remove and discard the screws.



6. Remove the 2 x Torx located on the tabs under the bumper.



7. Disconnect the wiring harness located inside the bumper near the LH side impact beam mounting (slide the red clip to unlock and then press inwards to unplug).



### **Cequent Customer Service**



### PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

8. Carefully peel away the bumper from the sides, dislodge the 2 x clips in the tail light cavity and remove the bumper.

### NOTE:

Ensure no other harnesses are connected to the bumper



9. Remove and dispose impact beam secured with 3 x nuts on LH and RH sides.



- 10. Insert side arm assembly into chassis rail and loosely secure accordingly:
  - From the side with 2 x M12 x 45 bolts complete with 1 x washer and 1 x tapped plate per bolt.
  - From under chassis rail with 1 x M12 x 45 bolt complete with 2 x washers and 1 x nut
  - From the rear onto studs using 3 x M10 nuts complete with 1 x washer per nut.

Repeat for the other side.



### **Cequent Customer Service**



### PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

- 11. Fit the crosstube to the side arms and loosely secure accordingly:
  - From the side with 2 x M12 x 45 bolts complete with 2 x washers and 1 x nut per bolt.
  - From under crosstube with 1 x M12 x 45 bolt complete with 2 x washers and 1 x nut.

Repeat for the other side.

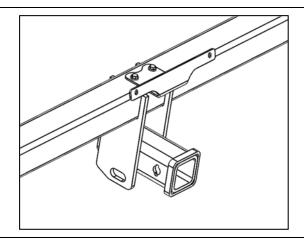
Beginning with the sidearm assemblies torque all fasteners as follows:

M10 : 44Nm M12 : 89Nm

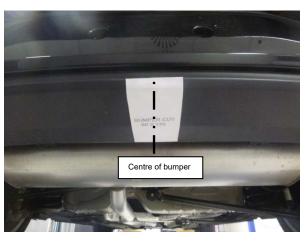


12. Loosely secure the bumper tab plate to the crosstube with 2 x tek screws.

They will be firmly secured after bumper fitment.



13. On the outside underside of the bumper, locate the centre of the bumper, mark out and cut the bumper 90mm wide X 170mm long (from the bottom edge, following the curve of the bumper) as depicted.

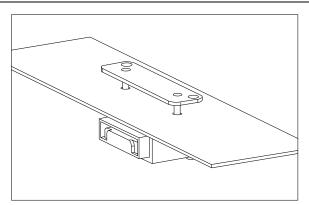


**Cequent Customer Service** 



## PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

14. Determine an appropriate position for the plug bracket. Mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket. Plug bracket can be installed after the bumper fitment.



15. Refit the bumper and other components following steps 8-6 and 4-1.

**Note:** Step 5 to be conducted after Step 1 as follows:

Secure the bumper to the bumper tab with 2 x M6 screws complete with 2 x washer and 1 x M6 Nyloc per screw.

Position the bumper and tighten the 2 x tek screws (bumper tab) to the crosstube.

**Cequent Customer Service** 



## Wiring Loom Installation Instructions

Holden Astra R Part No: 101567-WL ECU: 04841

Tail Length Required: 1800mm

Wiring Loom Installation Time: Approx 30 Mins



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.

Page 1 of 4

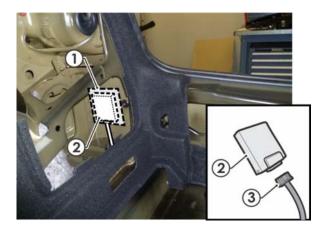
Issue Date 31-03-17



- 1. In the luggage compartment, fold down the rear seats.
- 2. Remove the parcel shelf and the luggage compartment floor trim.
- 3. Remove the tool trays and the spare wheel.
- 4. Remove both LHS and RHS luggage compartment trim covers.
- 5. Remove the luggage compartment scuff plate.
- 6. Behind the RHS scuff plate area, drill out a Ø30mm hole (1) in the sheet metal. File down any rough or sharp edges and apply rust inhibitor (not supplied) after drilling.



7. Using an alcohol wipe, clean the flat sheet metal area (1) and the underside of the ECU (04841) (2). Apply double sided tape to the ECU (2) and secure it to the vehicle sheet metal in the area shown. Connect the trailer patch 12-way connector (3) to the ECU. Ensure the ECU is mounted with the connector pointing downwards.



- 8. From behind the RHS tail light, remove the fastener and dislodge the tail light.
- 9. Disconnect the tail light connector by releasing the red secondary lock and pull the harness including the grommet back into the vehicle.

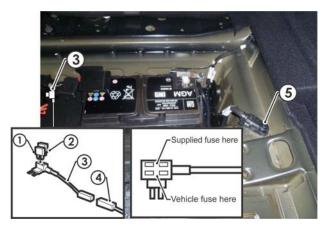
Page 2 of 4

Cequent Customer Service

Issue Date 31-03-17



- 10. Patch in the trailer patch (P/No: 101567-WL) connectors in between and push through the cavity ensuring the trailer patch grommet is seated correctly. **The vehicle grommet remains inside the vehicle.**
- 11. Route the trailer patch along the vehicle to the LHS tail light and repeat.
- 12. Route the trailer patch terminal branch up along the LHS 'D' pillar and into the head lining. Locate the vehicle harness in the roof lining and using a multimeter, locate the reverse wire signal.
- 13. Connect the ezy-tap to the located vehicle signal wire, then connect the trailer patch terminal to the ezy-tap.
- 14. Remove the indicated vehicle yellow 20A fuse (1). Insert the vehicle 20A fuse (1) and the supplied 20A fuse (2) to the add-a-fuse harness (3). Connect the trailer patch 1-way connector connector (4) to the add-a-fuse harness (3). Insert the add-a-fuse harness (3) to the previously removed fuse location. **Ensure the add-a-fuse harness is oriented as shown.**
- 15. Secure the trailer patch ground ring terminal to the vehicle grounding point (5).



- 16. At the rear exterior of the vehicle, mount the trailer socket to the towbar mounting bracket using M4 fasteners (not supplied).
- 17. Route the tail harness (tail length: 1800mm) across the RHS and up into the drilled out hole. Adjust the trailer patch harness grommet so that it is seated correctly and cable tie (not supplied) in place.
- 18. Connect the tail harness 8-way connector to the trailer patch 8-way mating connector and refit the tail lights.
- 19. The vehicle RPA function can be disabled via a switch on the center console next to the shifter.
- 20. Test the trailer patch function using a light board or multi-meter.
- 21. Secure all harnesses using cable ties (not supplied).



- 22. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
- 23. Place the fitting instructions in the glove box after fitment.
- 24. If vehicle is factory fitted with park assist, it can be disabled via a switch under the start button.

Page 4 of 4

Issue Date 31-03-17

**Cequent Customer Service** 



# FITTING INSTRUCTIONS Silent Anti-Rattle Hitch Pin (PRO001)

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

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

\*Do not tow with your vehicle if the R CLIP or the HITCH PIN is loose or missing. Replacement parts are available from your Pro Series Distributor.

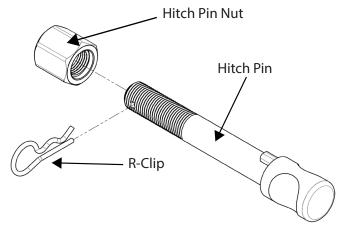
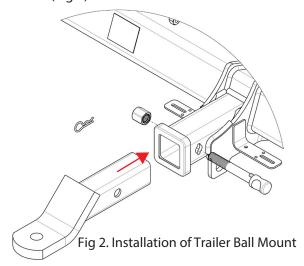


Fig 1. Silent Anti-Rattle Hitch Pin assembly

STEP 1

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



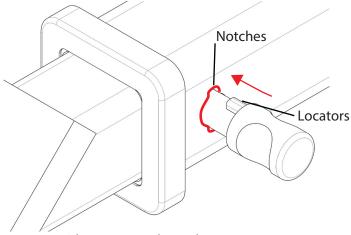


Fig 3. Silent Anti-Rattle Hitch Pin orientation

STEP 2

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

STEP 4

Tighten HITCH 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 HITCH PIN R CLIP through the hole on the HITCH PIN (Fig. 1).

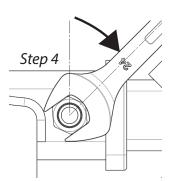


Fig 4. Tightening of Silent Anti-Rattle Hitch Pin Nut