

RV6176
Batch 000000

Range Rover Evoque (From 2011)
Type Approval Number E11 55R-01 11122

COMPONENTS		
ITEM	QTY	DESCRIPTION
A	1	Towbar
B	1	Detachable Towbar Neck Kit – ZCA6014 > Detachable Towbar Neck & Housing > Weather Plug > Storage Bag > Operation Manual V2 > Swan Neck Ball Cap (ZM1406)
C	1	Side Arm (LH)
D	1	Bracket
E	1	Brace
EP	1	Retractable Electrical Mounting Bkt (ZM1490)

BOLT PACK		
ITEM	QTY	DESCRIPTION
G	2	M14 x 100 Bolts & Washers
H	4	M12 x 25 Bolts & Washers
I	2	M12 x 40 Bolts, Nuts & Washers
J	2	M12 x 35 Bolts, Nuts & Washers
K	3	M12 x 35 Bolts & Washers
L	2	M14 Washers - 27mm O/D x 2mm Thick
M	13	M12 Washers – 23mm O/D x 1.6mm Thick
N	3	M10 H/D Washers – 30mm O/D x 5mm Thick
X	2	Existing M10 Flange Nut (Not Supplied)
Y	1	Existing M8 Flange Nut (Not Supplied)

FITTING PROCEDURE

- ⇒ **Note:** The towbar can be installed without removal of the rear bumper, providing an access hole is drilled behind the towing eye cover to access fixing (Y) – See illustration. However, for ease of access, it is recommended that the following installation procedure is followed where bumper removal is required.
- ⇒ Under the rear of the vehicle lower exhaust from its 3 rearmost hangers and carefully support. Remove the 4x 10mm bolts securing the bumper frame to the rear panel. Retain fixings for reinstallation later.
- ⇒ Remove rear light clusters (Release access flap from inside edge and remove 2x Phillips screws on each, pull directly rearward to release from peg and disconnect wiring harness). Remove bumper (2 push-in plastic fixings in boot hatch aperture, 1x 10mm bolt & 2x screws in each wheelarch. Carefully pull out each wheelarch surround to release from its first 3 clips. Pull bumper tips outboard to release bumper from clips along bumper-body edge, prior to pulling rearward to release from clips along boot shut panel. Remove & discard heat shield from the inside of the bumper (4x torx bolts)(Hand to vehicle operator for retention).
- ⇒ Remove and retain the existing lower bumper beam fixings (X) & (Y). On the left hand side, position bracket (D) over the studs and loosely attach using existing fixings (X) & (Y). Locate the M14 mounting holes in the underside of the left hand chassis rail. Position side arm (C) between bracket (D) and the chassis and attach using bolts (G) with flat washers (L) under the bolt heads.
- ⇒ On the right hand side, locate the 3x M12 threaded fixings in the underside of the towing eye pressing. Loosely attach brace (E) using bolts (K) with flat washers (M) under the bolt heads.
- ⇒ Position 3x spacer washers (N) over the existing stud (X) on the right hand side. Locate tag on towbar (A) over this stud and loosely attach using existing nut (X). Loosely attach towbar (A) to side arm (C) using bolts (I) and to brace (E) using bolts (K), with flat washers (M) under the bolt heads and nuts at all positions. Ensure the bolts are inserted as illustrated.
- ⇒ Attach detachable towbar neck housing (B) & retractable electrical mounting bracket (EP) to towbar (A) using bolts (H). **Note: Where there is no electrical mounting bracket (EP), use additional flat washers (M) under the bolt heads. The electrical mounting bracket carries type approval information required by law and must always be fitted as shown.** Please refer to separate fitting instruction (ZM1418/19/20/90) for assembly and use of the retractable electrical mounting bracket.
- ⇒ **For 12N or 13 Pin Electrical Socket Fitment:** Cut section from bumper as illustrated by the unbroken shaded area.
- ⇒ **For 12S Electrical Socket Fitment (Retractable Option):** For 12S Socket Additions where it is desired to retract the electrical mounting bracket, it is necessary to use additional Electrical Mounting Bracket ZM1420 (Purchased Separately). This is mounted to the right of the towbar as illustrated by the ghost image. An additional bumper cut will be required and is illustrated as the dotted shaded area.
- ⇒ Fully tighten all bolts, ensuring all components seat correctly against their mounting faces, remain square and that the towball faceplate remains vertical.
- ⇒ Replace bumper and rear light clusters. Replace 4x 10mm fixings under vehicle securing bumper to rear panel – These are located to the rear of towbar (A) and can be replaced although access is compromised. Raise exhaust and reattach to its hangers. Ensure sufficient clearance is provided between the exhaust silencer and the towbar – Manipulate the exhaust hangers if required.
- ⇒ **NOTE: Due to the close proximity of the exhaust silencer, it is recommended side exit sockets/gaskets are used if it is desired to retract the electrical sockets. Ensure any cabling is routed away from the exhaust.**
- ⇒ **NOTE:** Please refer to Operation Manual for Use and Maintenance of the Detachable Neck System.

TIGHTEN ALL BOLTS

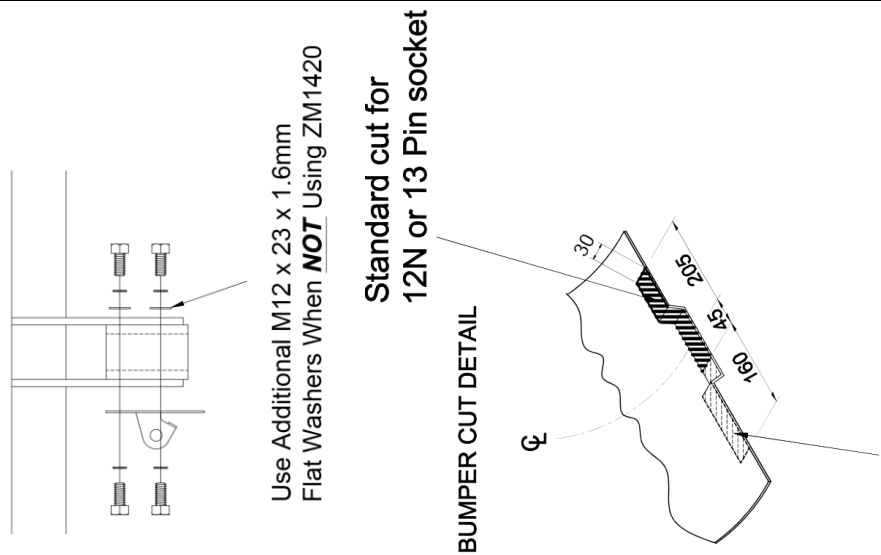
TORQUE SETTINGS ISO Coarse Pitch M8=29Nm, M10=58Nm, M12=102Nm, M16=252Nm
ISO Fine Pitch M8=31Nm, M10=61Nm, M12=111Nm

THE VEHICLE MANUFACTURER'S SPECIFICATION FOR THE TRAILER WEIGHT AND NOSE LOAD LIMITS MUST BE OBSERVED.

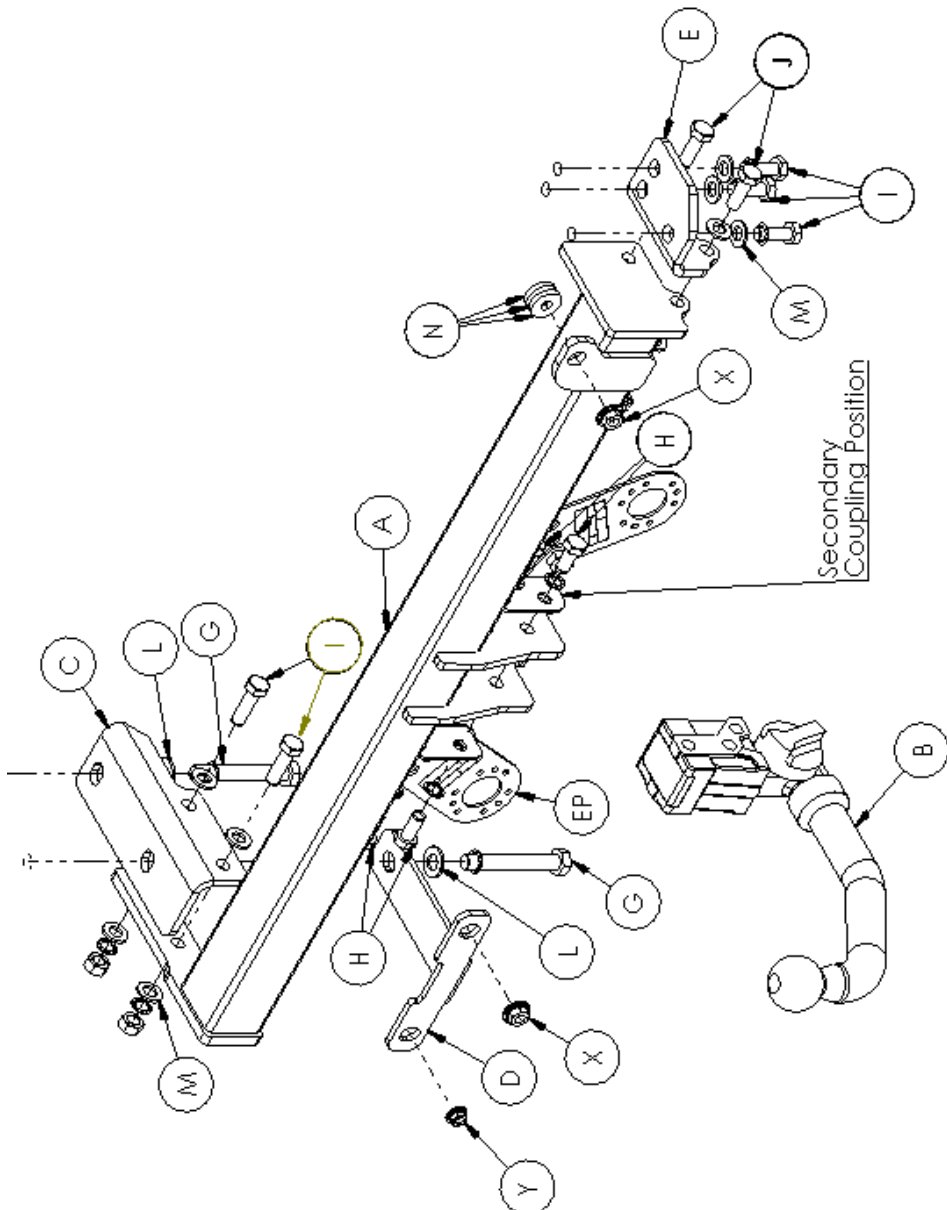
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FITTING DIAGRAM



Additional cut for 12S socket when used with Retractable Electrical Mounting Bracket ZM1420



IMPORTANT PRODUCT INFORMATION & GUARANTEE

(TO BE RETAINED WITH THE VEHICLE AND PASSED TO SUBSEQUENT OWNERS)

Thank you for purchasing a PCT Automotive product. Please read the following information carefully before fitting or using your PCT Automotive product.

GUARANTEE

We shall free of charge either repair or at our option replace defective goods where the defects appear

- i. if the goods are a towbar manufactured by us, during the economic lifetime of the vehicle it was first fitted to
- ii. in the case of all other products manufactured by us, within 3 years following the date of your order

PROVIDED THAT (in each case) such defects shall be found to our reasonable satisfaction to have arisen substantially from our faulty design, workmanship or materials and have not arisen by reason of a failure to follow our instructions (whether written or oral), any modification, misuse, neglect or interference with the installation, any damage or abuse to the goods or vehicle by impact or vandalism or by a failure to carry out reasonable inspection, maintenance and/or adjustment.

At all times, the above guarantee is subject to our standard terms and conditions of sale a copy of which is available upon request from our offices.

TOWING LIMITS

Our towbars have been designed for towing up to the vehicle manufacturer's maximum recommended trailer weight and nose load limits for your model. Towing with gross weights above that recommended at any time will invalidate the guarantee and cancel any liability for damage. Towing a twin axle trailer, towing over rough ground or using a bicycle/motorcycle carrier, etc, exerts extreme loads on to a towbar and extra care should be taken in these situations not to exceed the vehicle manufacturer's maximum recommended limits.

PRODUCT IDENTIFICATION MARK

Your product carries a product identification mark. This mark carries important product and batch code information and if the product is type approved it also carries the type approval details which are required by law. Under no circumstances should this mark be defaced, removed or damaged.

INSTALLATION, INSPECTION, MAINTENANCE AND ADJUSTMENT

GENERAL INSTALLATION

- ⇒ All products should only be fitted by competent persons. Electrical products must only be fitted by an experienced auto-electrician.
- ⇒ Read the product fitting instructions carefully and check all components are included in the fitting kit before commencing installation.
- ⇒ Check vehicle for corrosion and/or accident damage. Towbars should not be fitted to any vehicle suffering from corrosion or accident damage or which is not in a roadworthy condition.
- ⇒ Clean off all road dirt, underseal and sound deadening mastic where parts are to fit to ensure correct seating of all components.
- ⇒ Bumper cut information is given as a guide only. Variations in models may occur therefore the fitter should always check that the bumper cut is necessary and of the correct size and shape before commencing with the cut.
- ⇒ All drilling swarf should be removed from the vehicle and all holes drilled in the vehicle should be treated with an appropriate rust inhibitor.
- ⇒ Do not fully tighten bolts before towbar is completely fitted unless instructed to do so in the fitting instruction, this will allow some variances to be overcome before final tightening of bolts.

PAINT & CORROSION

Towbars manufactured by PCT Automotive undergo a phosphate chemical pre-treatment prior to a polyester powder coat finish being applied. For long lasting good looks and in order to prevent corrosion the towbar should be regularly inspected for paint damage and wherever necessary re-painted in an appropriate finishing paint or underseal. The vehicle should also be regularly checked for any corrosion that could affect the towbar installation. Towbars should not be used on any vehicle suffering from corrosion that could affect the towbar installation.

BOLTS

All towbar fixing bolts should be checked initially after the first 300 towing miles, or the initial 500 miles of driving uncoupled, and then every 3,000 towing miles or to coincide with the vehicle manufacturer's recommended service intervals, whichever is the sooner. All towbar fixing bolts should be tightened using an appropriate torque wrench to the settings specified in the towbar fitting instruction.

ELECTRICAL INSTALLATION, TEST/COMMISSIONING AND MAINTENANCE

Failure to comply with the following instructions may cause damage to the towing vehicle's wiring loom and/or towing electrics installation.

Where displacement tap connectors e.g. Scotchlocks, are the preferred method of connection, always use the correct colour coded tap connector for the size of cable to which it is to be connected. All towing relays and modules manufactured by PCT Automotive have cabling with a copper cross-sectional area in the range 0.5mm² to 1mm².

After installation of the 12N/12S sockets, prior to testing, a water displacement agent e.g. WD40 should be applied into the rear connection void through the water drain hole at the bottom of the sockets and also into the front pins under the socket flap. This socket maintenance should be carried out at least twice a year in the spring and autumn.

The towing electrics test procedure must be undertaken with the engine running. If any of the towing relays fail to function correctly, with the engine running and no other vehicle electrical systems turned on, check that the voltage across the vehicle's battery is between 13V and 14V approx, if this voltage is not correct, check the condition of the vehicle's battery/alternator.

Always ensure that the trailer/caravan/lighting board's own electrical systems are installed and functioning correctly before coupling to the vehicle's 12N/12S sockets.

Every six months (spring and autumn recommended) the battery and alternator of the vehicle should be checked to determine correct electrical functioning. All connections of the electrical installation including the earth should be checked for mechanical soundness and electrical quality. Plugs, sockets, relays and fixings should be checked for water ingress, mechanical soundness, electrical quality and general wear and tear.

Please complete the following information to validate the guarantee and for future reference.

VEHICLE OWNER NAME & ADDRESS:

VEHICLE MAKE & MODEL:

VEHICLE REGISTRATION NUMBER:

FITTER NAME & ADDRESS:

DATE TOWBAR FITTED:

If you have any comments or suggestions about the PCT Automotive product fitted to your vehicle, please address them to PCT Automotive, New Street, Holbrook Industrial Estate, Sheffield S20 3GH or email techsupport@pctautomotive.com
Your comments will help us in our aim to continually upgrade our products to meet the high standards expected by our customers.