



## FITTING INSTRUCTION

**PG4547** Batch 000000

Peugeot Boxer, Citroen Relay/Jumper, Fiat Ducato (Van Based Vehicles)(From 2006)

Type Approval Number E11 55R-01 11246

COMPONENTS			
ITEM	QTY	DESCRIPTION	
A C D E F G H CP	1 1 1 1 1 2 2 1	Towbar Support Arm (R/H) Support Arm (L/H) Side Arm (L/H) Side Arm (R/H) Towing Eye Spacer Plates Chassis Insert with Captive Nut 10mm Coupling Packer (ZMCP10)	

BOLT PACK			
ITEM	QTY	DESCRIPTION	
ı	2	M16 x 55 Bolts, Nuts & Washers	
J	2	M12 x 140 Bolts & Nyloc Nuts	
K	4	M12 x 55 Bolts & Nyloc Nuts	
L	1	M12 x 55 Bolts & Washers	
М	2	M12 x 40 Bolts & Nyloc Nuts	
N	1	M12 x 40 Bolt & Washer	
0	2	M10 x 45 Bolts, Nuts & Washers	
Р	4	M10 x 35 x 1.25 Fine Pitch Bolts & Washers	
Q	4	M8 x 35 Bolts & Washers	
R	2	M6 Nuts & Washers	
S	14	M12 H/D Washer – 30mm O/D x 5mm Thick	
Т	8	M12 Flat Washer – 23mm O/D x 1.6mm Thick	
U	8	M10 H/D Washer – 30mm O/D x 5mm Thick	
V	4	M8 H/D Washer – 25mm O/D x 3mm Thick	
W	2	M6 Flat Washer - 12mm O/D x 1.4mm Thick	
Х	2	Spacer Tubes – 19mm O/D x 74mm Long	

#### FITTING PROCEDURE

- ⇒ Remove central section of bumper (4 Torx bolts on upper edge & 4 below). Disconnect plug for reversing sensors (If fitted). Remove the 4 bolts and 2 nuts securing the bumper impact beam. The beam is not refitted and should be passed to the vehicle operator for retention.
- ⇒ Loosely attach towbar (A) to threaded fixings in vehicles rear panel. On vehicles from 2006-2007 use M8 bolts (Q), with heavy duty washers (V) under the bolt heads. On vehicles from 2007 where the fixing has changed to M10, use bolts (P) with heavy duty washers (U) under the bolt heads. Note: On some vehicles from Spring 2008 (Chassis Number 01428235>) the holes for the outboard fixings (P) have been omitted. It is necessary to very carefully drill the panel, using the illustration as a guide, to access the threaded fixing behind. Treat the area with a suitable rust inhibitor. At the lower position attach towbar (A) to existing hole using bolts (O), inserted from the front of the vehicle and with heavy duty washers (U) under both bolt heads and nuts. Note: On vehicles where the panel is misaligned, it may be required to open up this hole to allow insertion of bolt (O).
- Remove the square rubber plug from the underside of each chassis rail & insert chassis inserts (H) into the hole. It is important that the threaded end is inserted first and then drawn back to allow the thread to locate central to the square hole. Attach support arm (C) to chassis insert (H) in the <u>right hand</u> chassis rail using bolt (L) with heavy duty washer (S) under the bolt head. Use 2x towing eye spacer plates (G) between (C) & the chassis, and 2x M12 flat washers (T) inside the square pressing. Attach support arm (D) to chassis insert (H) in the <u>left hand</u> chassis rail using bolt (N) with heavy duty washer (S) under the bolt head. Use 2x M12 flat washers (T) inside the square pressing.
- ⇒ On SWB-MWB-LWB models: Locate existing mounting positions (J). Loosely attach side arms (E) & (F) using bolts (J) with heavy duty washers (S) under both the bolt heads & on the outside of the chassis. Attach side arms (E) & (F) to towbar (A) (Ensure correct positioning) using bolts (M) with flat washers (T) under bolt & nut.
- ⇒ On Maxi / XL models: Lower spare wheel. Loosely attach side arms (E) & (F) to towbar (A) (Ensure correct positioning) using bolts (K) & (M). Locate side arms (E) & (F) against side of chassis & ensuring assembly is level and square, mark and drill at 13mm O/D for positions (J). Remove side arms (E) & (F) and open up the position on the inside face only to just accept spacer tubes (X). Loosely attach side arms (E) & (F) using bolts (J) with heavy duty washers (S) under both the bolt heads & on the outside of the chassis, and spacer tubes (X) inside the chassis. Attach side arms (E) & (F) to towbar (A) (Ensure correct positioning) using bolts (M) with flat washers (T) under bolt & nut.
- ⇒ Loosely attach support arms (C) & (D) together with side arms (E) & (F) to towbar (A) using bolts (K). Use washers (S) under the bolt head and nut at all positions.
- ⇒ Ensuring assembly is square & level, tighten all bolts starting with (P)/(Q). Raise spare wheel.
- ⇒ Cut section from lower edge of bumper as illustrated. Refit to vehicle using reverse of above procedure. Use existing fixings together with replacement nuts (R) and washers (W) for the central lower fixings. Note: Due to subtle variations, tags on towbar (A) can be manipulated to suit.
- ⇒ Note: Use coupling packer (CP) when attaching a standard coupling ball to the lower hole setting.

A type approved towball with 'D' and 'S' values that match or exceed those of the towbar must be fitted. The horizontal distance from the towbar faceplate to the centre of the ball must not exceed 76mm. The vertical distance from the centre of the towball holes to the centre of the ball must not exceed 75mm. The towbar has also been tested for use with a PCT Automotive universal coupling ZC1405, Bradley universal coupling part code V352L (E40TC) or Dixon-Bate universal coupling part code 202014.

TIGHTEN ALL BOLTS

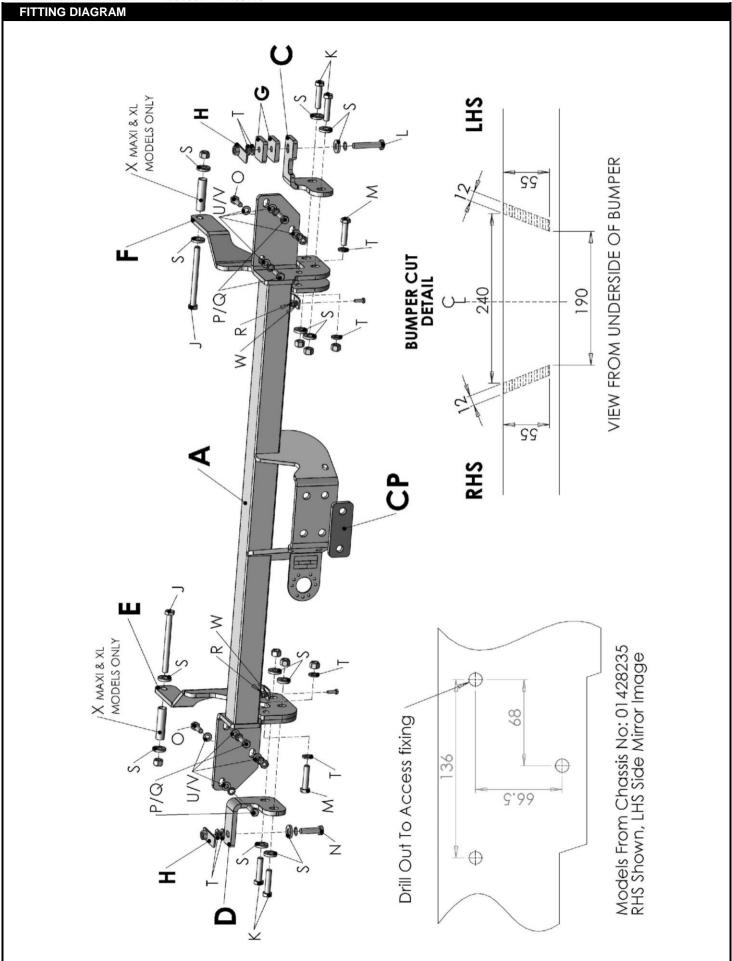
TORQUE SETTINGS ISO Coarse Pitch M8=29Nm, M10=58Nm, M12=102Nm, M16=252Nm ISO Fine Pitch M8=31Nm, M10=61Nm, M12=111Nm

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





# FITTING INSTRUCTION



## **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. Scotchloks, 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 0.5mm<sup>2</sup> to 1mm<sup>2</sup>

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.