



FITTING INSTRUCTION

TY3565
Batch 000000

Toyota Alphard (From 2002)

COMPONENTS		
ITEM	QTY	DESCRIPTION
A	1	Towbar
B	1	Towbar Neck
B1	2	Spacers (ZMSB12)
C	1	Side Arm (LH)
D	1	Side Arm (RH)
EP	1	Electrical Mounting Bracket (ZM1390)

BOLT PACK		
ITEM	QTY	DESCRIPTION
E	2	M16 x 50 Bolts, Nuts & Washers
F	2	M12 x 100 Bolts & Nyloc Nuts
G	4	M12 x 100 Bolts, Nuts & Washers
H	4	M12 x 35 Bolts, Washers & 3 Nuts
I	3	M12 x 35 x 1.25 Fine Pitch Bolts & Washers
J	2	M8 x 16 Bolts, Nuts & Washers
K	9	M12 H/D Washer – 30mm O/D x 5mm Thick
L	4	M12 Washer – 23mm O/D x 1.6mm Thick
M	4	M8 Washer – 16mm O/D x 1mm Thick
N	4	Spacer Tubes – 19mm O/D x 58mm Long

FITTING PROCEDURE

- ⇒ Lower the spare wheel from its carrier. Release the rear exhaust box from the three rearmost hangers and support. Remove the 4x bolts securing the heat shield and remove. Remove the towing eye assembly from the left and chassis rail and discard (Hand to vehicle operator for retention).
- ⇒ Remove and discard the plastic plugs securing the two lower bumper tags, and replace with bolts (J) with flat washers (M).
- ⇒ Locate the rearmost & forwardmost holes present in the inside face of the chassis on the right hand side. Using these as a guide drill centrally through the outside face of the chassis rail at 12.5mm diameter. From the forwardmost hole, measure rearward 80mm and drill 12.5mm diameter through the inside face of the chassis rail.
- ⇒ Locate the forwardmost hole present in the inside face of the chassis rail on the left hand side. Using side arm (C) as a guide, make sure the plate is level and drill centrally through the outside face of the chassis rail at 12.5mm diameter.
- ⇒ Loosely attach side arm (C) to the existing rearmost hole and the forwardmost drilled hole using fine pitch bolt (I) for the rearmost hole with heavy duty 30mm O/D washer (K) under the bolt head and bolt (G) with heavy duty 30mm O/D washer (K) under both the bolt head and nut, with spacer tube (N) inside the chassis rail for the forwardmost hole.
- ⇒ Loosely attach side arm (D) to the three holes on the outside face of the chassis rail using bolts (G) with heavy duty 30mm O/D washers (K) under the bolt heads and spacer tubes (N) inside the chassis rail with heavy duty 30mm O/D washers (K) and nuts on the opposite side of the chassis rail.
- ⇒ Insert towbar (A) between side arms (C) & (D) loosely attach to side arm (C) using bolts (H) with washer (L) under the bolt heads. Loosely attach to side arm (D) using bolts (H).
- ⇒ Insert fine pitch bolts (I) with washers (L) under the bolt heads securing the end plate on towbar (A) to the underside of the chassis rail.
- ⇒ Ensuring all components are square & level, full tighten all bolts.
- ⇒ Attach towbar neck (B) with spacers (B1) along with electrical mounting bracket (EP) using bolts (F). Ensure (EP) is positioned in the highest most possible position and angled if required. Note: On models with bodykit, cut bumper to suit towbar neck.
- ⇒ Replace exhaust heat shield and rehang exhaust on its hangers. Ensure a minimum of 20mm gap between the towbar crossbar and the exhaust tail pipe. (Bend exhaust hangers down if required). Raise spare wheel.

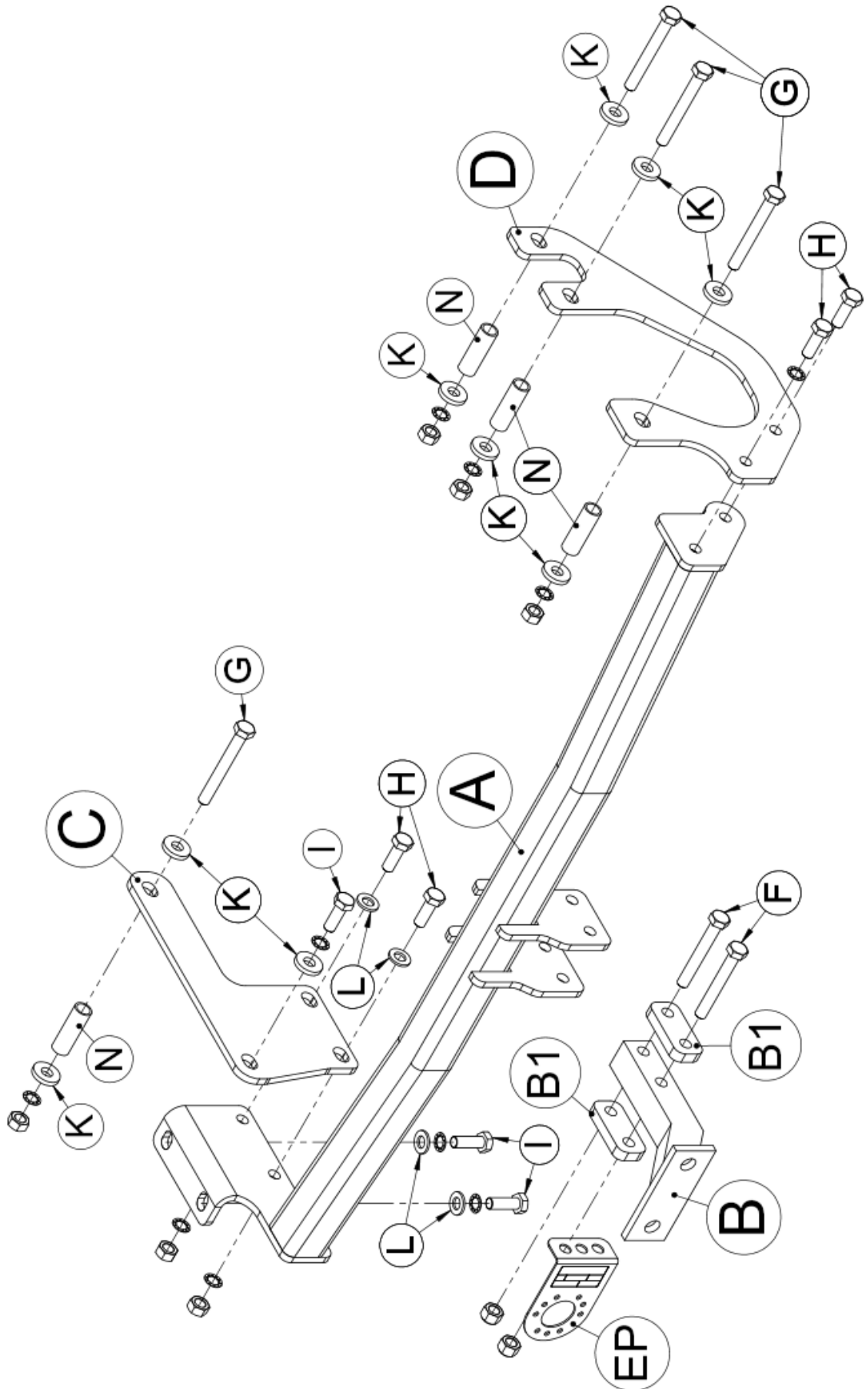
Also for use with Detachable Neck Coupling (Part code ZCA2070)

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 DIAGRAM



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.