



# Fitting Instructions

TOWBAR MR23R  
For MERCEDES E CLASS W211  
September 2002 -

## MATERIALS

A	1	Cross Bar
C	1	Neck with European facing to 94/20/EC A50-1
D	1	Left Hand Sidearm
E	1	Right Hand Sidearm
F	2	Angle Cleat
G	4	M12 x 1.75 x 40mm Bolts, Lock Washers and (30mm O.D.) Flat Washers
H	8	M12 x 1.75 x 40mm Bolts, Nuts, Lock Washers and 12 (30mm O.D.) Flat Washers
J	4	M12 x 1.75 x 40mm Bolts, 2 Nuts, Lock Washers and 4 (30mm O.D.) Flat Washers
K	2	M12 x 1.75 x 90mm Bolts and Nyloc Nuts
L	2	25mm O.D. Bush, 28mm Long
EP	1	Electrical Mounting Plate
CB	2	M16 x 50mm Coupling Bolts, Nuts, Lock Washers

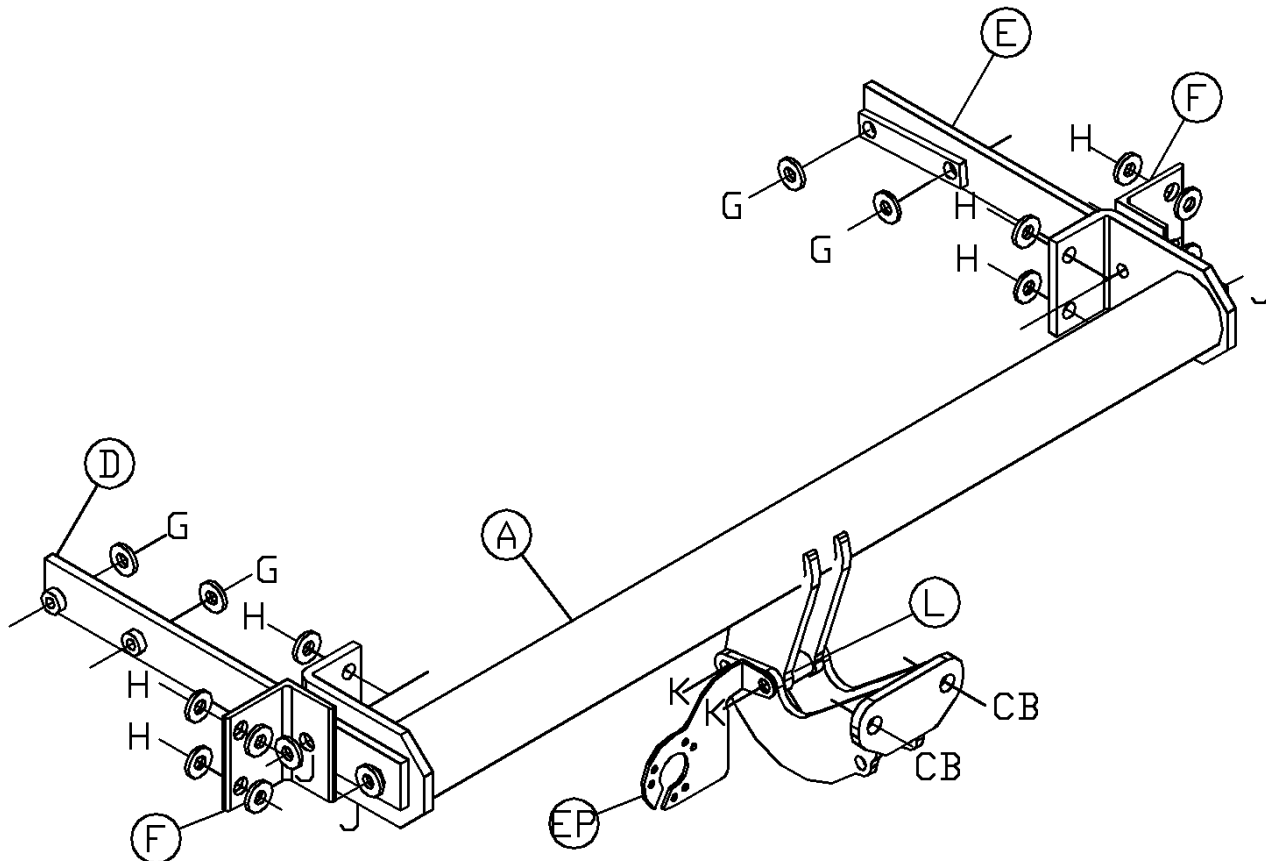
## FITTING

1. Remove bumper (2 bolts behind boot side panels along bumper edge, 2 bolts along rear panel, 1 tip screw and 1 push in clip on wheel arch, 4 clips along rear panel and 2 along lower edge). Remove and discard bumper beam.
2. Insert Sidearms (D) and (E) inside chassis openings and loosely attach to existing holes using bolts (G) with Flat washers (the battery and jack mounting bracket needs to be released to gain access to mounting holes).
3. Loosely attach Crossbar (A) and Angle Cleats (F) to rear panel using Bolts (H) with Flat Washers. Loosely attach Sidearms (D) (E) and Angle Cleats (F) to Crossbar (A) using Bolts (J) with Flat Washers.
4. **Tighten all bolts.** To prevent water entering the chassis/wheel pan area the ends of the chassis must be sealed off (e.g. expanding cavity foam filler).
5. Refit bumper and attach Neck (C) with Bushes (L) and Bolts (K), **fully tighten bolts** (the fitting of electrical plate (EP) is optional).

**Note:** This towbar must be used with either a Witter Towball (part number Z1) or Class A50-1 or A50-X towball dimensionally conforming to A50-1 with a 'D' and 'S' value greater than or equal to that of the towbar, also for use with Witter Removable Towball Unit (part number ZR2M000).

Please refer to the vehicle specification for the trailer weight and nose limits, which **must be observed**.

**Recommended torque settings:** M8 - 27Nm, M10 - 53 Nm, M12 - 95 Nm, M14 - 150 Nm, M16 - 214 Nm





# Fitting Instructions

QUANTUM DETACHABLE  
TOWBALL SYSTEM  
(ZQ XXXX)

## MATERIALS

A	1	Receptor/Socket for Towball
T	1	Detachable Towball
K	2	Keys for Detachable Towball
X	4	M12 x 25 x 1.75mm Bolts, Spring Washers and Flat Spacer Washers (25mm O.D)
FC	1	Fixed Weather Cover
RC	1	Removable Weather Cover
L	1	Centreline Label
B	1	Bag
ZQM1	1	Operation Manual

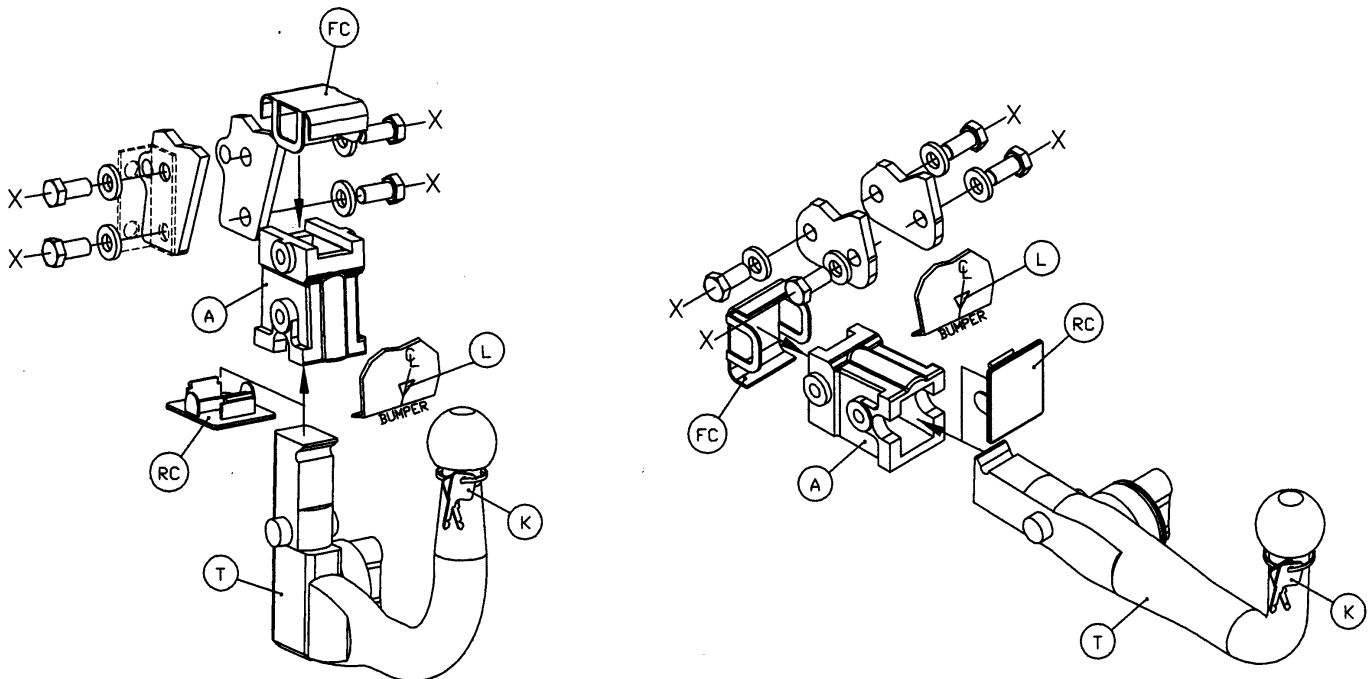
## INSTALLATION PROCEDURE

1. Place black plastic fixed weather cap (FC) over forward/ (horizontal system) / upper (vertical system) holes of receptor/socket (A), insert receptor/socket (A) into gap between mounting plates on the towbar, and loosely attach using bolts (X).
  - Notes: (ZEQ1), which is provided as part of the towbar should be refitted on left hand side, together with the electrical socket mounting plate (ZEP1). Only use the 25mm O.D Flat Spacer Washers (X) where there are no loose components attached, i.e. ZEQ1 (electrical socket mounting plate bracket, shown in dashed linetype below).
2. Insert detachable towball unit (T), using procedure detailed in Operation Manual provided, and ensure correct vertical alignment of the towball before fully tightening bolts (X).
3. Attach centreline label (L) to lower edge of bumper.
4. Remove keys (K) from neck of towball, and record the key number in the Operation Manual, together with the fitters name, telephone number, date fitted, vehicle model and registration number and towbar part number.

**Bumper Cut – It may be necessary to trim the bumper to allow adequate clearance around the operation handle on the right hand side.**

**Note:** It is essential that the customer/end user is familiar with the operation of the towball system, as detailed in the operation manual, which must be handed to the customer/end user.

**Recommended torque settings:** M12 - 95 Nm



Important – It is essential to ensure that the Operation Manual is in the possession of the end user.