TOWBAR KA5A



for KIA CARENS Mk 1 - 2000 to Nov 2002 and KIA CARENS Mk 2 - Nov 2002 -

MATERIALS

А	ı	rowbar Maintraine with European facing to 94/20/EC A50-1			
D	1	Sidearm (Right Hand)	E	1	Sidearm (Left Hand)
F	2	Bumper Support	G	2	Spreader Plates
Н	8	M10 x 100 x 1.5mm Bolts, Nuts, Lock W	ashers and La	rge Fla	t Washers (30mm O.D)

Bushes 19mm O.D. 62mm long H1

M12 x 35 x 1.75mm Bolts and Lock Washers J

Κ M12 x 35 x 1.75mm Bolts, Nuts and Lock Washers

2 L M10 x 35 x 1.5mm Bolts and 6 Large Flat Spacer Washers (30mm O.D)

Μ M8 x 20 x 1.25 Bolts

4 2 Ν Bushes 17mm O.D, 74mm long 2 M10 x 100 x 1.5mm Bolt

M10 x 40 x 1.25mm Bolts and Lock Washers Q 2 M10 Large Flat Washers (30mm O.D) R 4

M16 x 50mm Coupling Bolts, Nuts and Lock Washers CB 2

ZEP35 Electrical plate (not shown)

FITTING

Notes: Parts N, P, Q and R are used for the Mk 1 Carens only. DO NOT mix Bolts (L) with Bolts (R), they have a different pitch. 1.

- Inside boot, remove rear air outlet vent covers, remove rear light clusters. Remove rear trim panel inside boot, disconnect rear fasteners 2. of side panel trims and move trim into centre of vehicle.
- 3. To remove bumper: Undo 10 fasteners on upper side of bumper, 4 around / rearward / underside of each wheel arch. Inside boot, locate bolts holding top of bumper arms to top of chassis rail (2 on each side), undo. Gently pull bumper tips outwards, then gently pull bumper rearwards. Remove bumper support brackets from plastic bumper beam, hand to customer.
- 4. Insert Sidearms (D and E) into chassis rails. Locate existing rearmost mounting point holes (H) inside boot (used to hold bumper arms in place), place Spreader Plates (G) onto boot floor, locate with rearmost Bolts (H), use as templates to drill forward most hole (H) into top of chassis rail, drop Bolt (H) into hole. Use Spreader Plates (G) and Sidearms (D and E) as templates to drill remaining hole (H) through chassis rails. Temporarily remove Spreader Plates (G), open up holes in boot floor only (ie. DO NOT OPEN UP HOLES IN LOWER FACE OF CHASSIS RAIL), insert bushes (H1). Place Spreader Plates (G) in position and locate with Bolts (H). Note: Mk 1 Carens has seatbelt anchorage brackets that need to be temporarily removed and remounted onto plates (G) at slot X with Washers (Q) under forward anchorage point, using Bolts (R). DO NOT mix Bolts (L) with Bolts (R), they have a different pitch.
- 5. Attach Mainframe (A) to Sidearms (D and E) using Bolts (J and K). Tighten all Bolts.
- Loosely attach Bumper Supports (F) to lower holes of plastic bumper beam, using original nuts and Bolts (M). Note: The Mk1 Carens 6. has a dirrefent bumper, orientate (F) as shown, use bushes (N) and Bolts (P) instead of Bolts and Washers (L).
- 7. Attach bumper assembly to vehicle using original fasteners. For Mk 2 Carens, estimate number of Spacer Washers required between Bumper Supports (F) and Sidearms (D and E). Attach Bumper Supports (F) to Sidearms (D and E) using Bolts (L) and required number of Spacer Washers. Note: For Mk 1 Carens, use Bushes (N) in place of Washers (L). Tighten all Bolts. Replace lights and trim.

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.

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



