

multi^{mac}

The four-seater child seat



Fitting Instructions and Manual



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1. INTRODUCTION

The MULTIMAC range of seats and accessories is designed to enable most cars to carry 4 (3 for small cars) children from newborn to 36 kgs (12 years) in complete safety.

The basic seat is attached to the car using permanently fixed tether straps (see Sections 3.1 & 5) with additional support being provided by the adjustable legs (see Section 3.3).

Children over 13 kgs * can sit forward-facing in the seat, and the shoulder-supports of the 5-point safety harness can be instantly changed to suit the child height by using the patented ADJUSTAMAC links (see Section 7).

Two detachable headrests are available to suit younger and older children:

The “YLVA” gives side support to young children’s heads, enabling them to sleep comfortably,

The “TOMMY” is a regular-type head restraint for taller children.

MINIMAC for newborn babies, up to 13kgs

The MINIMAC is a bespoke rear-facing seat, with carry handles, which simply slots and “locks” into position when one of the main seat cushions is removed.

COLOURS

The MULTIMAC and MINIMAC are available in a range of standard colourways to enable a complementary fitment to your car.

If you have a specific requirement to match your existing upholstery, our ‘bespoke’ department can provide leather, alcantara or any other fabric to match your car interior exactly.

The following pages describe how the MULTIMAC should be fitted, adjusted and maintained, but before reading these, please take note of the following general rules, particularly with regards to **Car Insurance**.

*In the UK, children from 9kg can legally sit forward facing, but we recommend they use the MINIMAC until they are at least 13kg.



4 seater



3 seater



The YLVA

The Tommy



The Minimac



In car

2. GENERAL RULES FOR MULTIMAC

2.1 CAR INSURANCE

Car manufacturers have to state the seating capacity of each model they produce, and obviously fitting a MULTIMAC can increase this.

The Association of British Insurers (ABI) have been notified of the MULTIMAC, and they have recognised and welcomed it as a contribution to increased child safety, and stated that because of this it should not result in any increase in premium.

However, you must notify your particular insurance company that you are using a MULTIMAC, both because your car may be carrying more passengers than its specified number, and because it is a high value item if you ever need to make a claim.

2.2 CORRECT FITMENT AND USE

The MULTIMAC has been specially designed and tested with many safety features, including its energy absorbing construction, and it is imperative that it is always installed correctly as described in the following pages, and no modifications or attachments are fitted without consulting MULTIMAC.

This applies to the upholstery and covers, which have particular energy absorbing characteristics, as well as being fire retardant and non-toxic, and they should neither be removed while the seat is in use, nor replaced with any non-original item.

2.3 CHILD SAFETY

You have bought a MULTIMAC to give your child the best safety and comfort you can.

To maintain this safety, please note the following general rules:

- Do not leave your children unattended in the car
- Pack all luggage securely, and do not leave it loose on the parcel shelf or in the rear. It would be very sad if your child was very safely secured in a MULTIMAC, but struck by flying objects during an emergency stop.
- If the car has been left parked in strong sunlight, check that the temperature of the seat fabric and buckle are not too hot before putting your child in the MULTIMAC.

3. FITTING THE MULTIMAC INTO YOUR CAR

With a little practice, the MULTIMAC can be fitted or removed from your car in one or two minutes as shown in the photographs:

- 3.1 Initially, the two tether straps provided with the MULTIMAC have to be fitted to the bolts securing the "lap strap" of the central rear seatbelt (Fig 3a).

Fittings will be different for each car and you may want this work to be done by your local garage. Full details are shown in SECTION 5.

Once fitted, the tether straps simply lie across the rear seat when not in use (Fig 3b). Before fitting the MULTIMAC, the adult buckles should be tucked away behind the seat so the MULTIMAC does not rest on them (see section 5.1)

- 3.2 The cushions from the two middle seats of the 4-seater Multimac (2 outer on 3-seater) are removed by lifting the front edge and threading the crotch-strap through the aperture in the seat, once the main buckle has been undone (Fig 3c).

This will reveal the two "ratchet adjusters" (Fig 3d).

- 3.3 To make the MULTIMAC more easily manoeuvrable, the two legs should be pulled out of their sockets (they are retained by elastic cords) and rested in the cavity created by moving the seat cushions, while the MULTIMAC is lifted into position, resting on the back seat of the car (Fig 3e).

NOTE – Caution – The MULTIMAC is quite heavy (35kgs) and normal care must be taken when lifting: ideally this is a 2-person job.

As an optional extra, 2 clip-in "lifting handles" are available which lock into the outer seat positions (once the cushions are removed) using the MINIMAC fixings (Fig 3f).

- 3.4 The handles of the ratchet adjusters should be released by pulling the locking bar (Fig 3g), and then pushed right back as far as they will go.

The tether straps should be threaded through the slots in the rear of the Multimac and then through the slots in the spindles of the ratchet adjusters and pulled through to remove all slack.

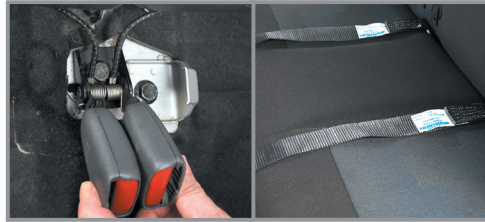


Fig 3a

Fig 3b



Fig 3c

Fig 3d



Fig 3e



Fig 3f

NOTE – Ensure that the tether straps are not twisted: the label should be on the top.

The handle of each ratchet adjuster should be rotated forwards (you will have to pull the locking bar again), and continue to be operated back and forth, pulling the MULTIMAC towards the back of the car seat (Fig 3h).

When it reaches the back of the car seat, but before the tether straps become tight (so you can still slide the MULTIMAC laterally), check that the MULTIMAC is positioned centrally and that you can close both car doors.

- 3.5 You now re-fit the legs in their sockets and adjust the height of the feet by rotating the threaded rod by hand (Fig 3j).

You only have to do this once, on the first fitting to your car and you should take some trouble to ensure that both legs are adjusted equally, and that, with the MULTIMAC in this position, the feet just rest on the carpet.

The legs should be pushed back as far as possible, and if any rugs or over-mats are fitted you should ensure that no hem or ridge is preventing the rubber coated foot of the MULTIMAC from sitting flat on the floor.

- 3.6 The ratchet adjusters are now fully tightened (Fig 3i): this will pull the MULTIMAC back into the car seat and also compress the legs.

You need not exert undue force as the ratchet adjusters have a magnifying effect, but ensure that the MULTIMAC feels "rock-solid" against the car seat back.

- 3.7 The ratchet adjuster handles are then rotated forward to their "closed" position and the seat cushions replaced (Fig 3k).

NOTE – There is a knack to refitting the seat cushions:

- Hold the front of the cushion, and lead the rear edge into position first (Fig 3l).



Fig 3g



Fig 3h

Fig 3i



Fig 3j

Fig 3k



Fig 3l



Fig 3m

- Be sure to slacken off the seat harnesses (Fig 3m) and pull them forward before rotating the back of the seat



Fig 3m



Fig 3n

- Push the front of the cushion down to rest on the front rail of the MULTIMAC.
- Check that the harness moves freely (Fig 3o).



Fig 3o

4. REMOVAL OF MULTIMAC

Removing the seat is a reversal of the above:

- Remove the 2 central MULTIMAC cushions
- Release the ratchet adjusters by pulling the locking bar and rotating the handles fully back to release the tension in the tether straps.
- Pull the seat slightly forwards to give it enough slack to allow you to remove the legs.
- Either pull the seat forwards to release the tether straps or pull the tether straps backwards out of the ratchet adjusters.
- Rest the legs on the horizontal surface of the seat as before.
- Slide the seat out of the car and store it safely, preferably horizontally on a shelf or table, or on its end, making sure it leans against a wall and cannot fall over.

CAUTION

The MULTIMAC upholstery is soft and the back and base of the seat are covered in smooth ABS plastic to protect your car-seat.

Please ensure that the MULTIMAC is not damaged by poor handling or poor storage: it should not rest directly on a hard surface or floor but on a suitable mat.

5. TETHER STRAPS



The MULTIMAC is secured into the vehicle by 2 tether straps. The **Eyebolt** is removed from the metal **Maillon** by unscrewing its long retaining nut (Fig 5a), and is fitted in place of the existing bolt securing the adult seat belts to the car floor (Fig 5b).

The **Eyebolts** supplied with your fitting kit will be the correct length and should be fitted as shown in Fig 5c with the 2 cone-washers facing each other.

The **Eyebolts** are pre-coated with a thread locking compound, and should be torqued to between 35 – 45 Nm using a 27mm socket spanner. The tension in the cone-washers should allow the eyebolts to be positioned with the hole axis horizontal as shown in Fig 5d.

If it does not align correctly, unscrew the **Eyebolt** and replace one of the cone-washers with the thinner one, supplied separately.

The **Maillon** is then threaded through the **Eyebolts** ensuring that the label on the Multimac is **uppermost** and the long Maillon nut retightened to a torque of 15 Nm (Fig 5e).



Fig 5a



Fig 5b



Fig 5c



Fig 5d



Fig 5e

SPECIAL FITMENTS

- 5.1 If your car is fitted with 'solid' buckles (Fig 5f) which cannot 'flip' out of the way when the MULTIMAC is put on the car seat, we will provide new buckles on webbing (Fig 5g) which should be fitted to replace the originals (Fig 5h).



Fig 5f



Fig 5g

- 5.2 If the adult seat belts in your car are not fitted to the floor (for example, they may be attached to removable seats), it may be possible to arrange a special fitment of the **Eyebolts** and you can call one of the specialist seat-belt fitting companies shown in the Appendix, or alternatively call MULTIMAC.



Fig 5h

6. FITTING THE HEADRESTS

The 2 available headrests fit in exactly the same way as regular headrests in a passenger car: the 2 chromed “legs” slot into the mating apertures in the top rail of the MULTIMAC.

The bezel on the right hand aperture has an exposed locking button: this must be pressed in before the headrest is inserted, removed or adjusted.

The left hand bezel has a “hidden” locking button which must be pressed in with your finger nail or a metal edge (eg key) to allow the headrest to be initially inserted.

NOTE – It may be necessary to remove the main car headrests to give clearance for these headrests.

Similarly, it may not be possible to fit or remove the MULTIMAC headrests in the outer positions while the MULTIMAC is properly fitted in the car, if there is insufficient headroom.

In this case, the tether straps should be slackened so that the MULTIMAC can be pulled forward a little to give enough clearance for the headrests in the fully retracted position, enabling them to be fitted/removed. The MULTIMAC should be fully tightened again afterwards (as in Section 3).

Headrest “TOMMY”

This headrest has been designed to give adequate head support for taller children and should be adjusted so that its centre height is in line with the child’s eyes.

Headrest “YLVA”

This headrest is height adjustable to give side support to the head of a baby from 13kgs up to approximately 22kgs. It should be adjusted so that its bottom edges are just above the child’s shoulders.



Tommy



YLVA

7. SECURING YOUR CHILDREN IN MULTIMAC

NOTE – Children up to 13kgs are safest when sitting in a rear-facing child seat.

If your child is less than 13kgs consider using a MINIMAC (Section 8).

CHILDREN OVER 13kgs

The MULTIMAC is fitted with 5-point harnesses and energy absorbing anti-slip chest pads to ensure your child is as safe as possible.

To maintain this high degree of safety it is important that the harness is adjusted correctly to fit your child and this is done very easily with the unique ADJUSTAMAC system (Fig 7a):

- Sit your child in the MULTIMAC and note their shoulder height against the backrest.
- Remove the ADJUSTAMAC links by rotating them through 90° and pulling them out of the slot in the seat back. Re-insert them in the slot corresponding to, or just below, your child’s shoulder height (Fig 7b).

The ADJUSTAMAC link is pushed in and then rotated to the horizontal to lock in position (Fig 7c).

- The seat harness is fitted with a “single point adjuster” and this is lifted up to release tension in the belts.
- Extend the harness by lifting the single-point adjuster lever (Fig 7d) and simultaneously pulling the seat belts forward where they emerge below the built-in chest pads.
- Put your child in the seat: assemble the 2 upper parts of the buckle together as shown (Fig 7e) and insert them into the lower portion of the buckle on the crotch strap. Press them in until they “click”.



Minimac



Fig 7a



Fig 7b

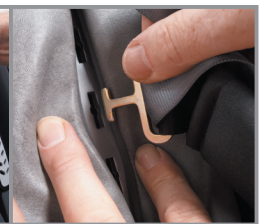


Fig 7c



Fig 7d



Fig 7e

- Pull the webbing through the single point adjuster until all 5 elements of the harness are tight against your child, with no slack (Fig 7f).
- Release the single-point adjuster strap and pull sharply on the harness to ensure there is no hidden slack.
- To undo the harness lift the lever on the single-point adjuster whilst your child simultaneously leans forward in the harness to create some slack.
- Press the red button on the buckle to release the 2 upper buckle parts: your child can then “unthread” their arms, and get out.



Fig 7f

CAUTION – Always be careful with the harnesses and try not to crease them or twist them, particularly where they pass through the metal parts of the buckle.

Should they become twisted, straighten them as soon as possible before they “set” in the twisted position.

8. MINIMAC BABY CRADLE

The MINIMAC is designed to safely carry a baby from newborn to 13kgs in a rear-facing position and it mechanically “locks” into position in one of the MULTIMAC seats.

NOTE – MULTIMAC Sizes – Each of the individual seats of the Multimac is available in two sizes:

“Club Class” – 330mm wide - is wide enough to accommodate the MINIMAC

“Comfort Class” – 300mm wide is not wide enough for the MINIMAC

The MULTIMAC is made of a variety of widths to fit a wide range of vehicles.

The MINIMAC will only fit the ‘club’ seat, and these positions are indicated by a green ● or red ● label in the seat base as shown in (Fig 8a).

The standard MINIMAC will fit the green ● positions and will be suitable for most families with 1,2 or 3 babies.

For families with quads (or triplets and a 3-seater MULTIMAC) the MINIMAC – R is available to fit in ● red label positions. It is identical to the standard MINIMAC, except its lock mechanism is opposite-hand.



The Minimac

The Multimac models available are:



“1320” – 4 “Club Seats”



“1200” – 4 “Comfort Seats”



“1260” – 2 “Club Seats”, 2 “Comfort Seats”



“1000” – 3 “Club Seats”

Fig 8a

8.1 FITTING THE MINIMAC

To fit the MINIMAC into the MULTIMAC, the seat cushion is removed as previously described under section 3.2 and we recommend that the ADJUSTAMACS are put in their highest positions so that the chest pads are kept out of the way (Fig 8b).



Fig 8b

Fig 8c

The crotch strap should be positioned to the right, as shown in Fig 8c to avoid obstructing the lock and if the MINIMAC is being used on a full-time basis we recommend that the crotch strap be taped in this position to prevent having to manually position it every time.

The MINIMAC should be lowered into position, keeping it “square” to the MULTIMAC and the front tongue inserted into the slot in the back of the MULTIMAC (Fig 8d).

The back of the MINIMAC should then be lowered and the lock will engage on the striker pin with a 2-stage action exactly the same as when closing a car door.



Fig 8d

CHECK – Try to lift the MINIMAC off the striker pin, to ensure it has engaged properly – there should be no slack: if there is some slack but the MINIMAC will not lift out completely it is secured on the “second” position and should be released and reinserted to engage on “full lock”.

8.2 REMOVING THE MINIMAC

The release mechanism for the MINIMAC is a lever under the right hand edge as shown in Fig 8e. To remove the MINIMAC, the carry handles should be used to “lift” the MINIMAC while the lever is moved to the right.

Once the lock has disengaged, the MINIMAC should be eased backwards to withdraw the tongue from the slot and it can then be lifted cleanly out of the car (Fig 8f).



Fig 8e

Fig 8f

8.3 SEATING THE BABY IN THE MINIMAC

The MINIMAC is fitted with a 3-point harness which is tensioned by pulling the “single-point-adjuster” strap at the front of the seat (Fig 8g). This is not easily accessible when the MINIMAC is fitted in the MULTIMAC so the baby should preferably be installed properly in the MINIMAC before it is put in the car.

To slacken the harness, the single-point-adjuster release button is pressed, (Fig 8h) while the 2 upper harness straps are pulled forward.

To release the baby, you press the red button on the buckle (Fig 8j) which releases the 2 upper straps: these can be moved out of position and the baby lifted out.

Adjustment of harness – 3 pairs of slots in the back of the MINIMAC allow the 2 top straps to be moved as the baby grows. This is done as follows (Fig 8i).

- The zip in the back cover is undone to allow access to the single-point adjuster strap and its metal yolk (Fig 8k).
- The 2 top harness straps are “unhooked” from the yolk and withdrawn through their existing slots.
- The 2 top harness straps are rethreaded through the higher slots, and then reattached to the yolk, taking care that they are not twisted (Fig 8l).
- The zip in the cover is done up.
- The crotch strap is similarly adjustable between 2 positions.



Fig 8g

Fig 8h



Fig 8i

Fig 8j



Fig 8k

Fig 8l

9. CLEANING AND MAINTENANCE

9.1 HARNESES

If the harness becomes dirty, it can be cleaned with warm soapy water. DO NOT USE ANY CHEMICAL CLEANERS AS THEY COULD WEAKEN THE HARNESS.

If any harness appears frayed or damaged, contact MULTIMAC for a replacement.

9.2 MAIN FABRIC

MULTIMAC

The MULTIMAC is upholstered in “regular” car fabrics, and can be cleaned either with warm soapy water, or any proprietry upholstery cleaner, taking care to read the instructions and ensure that they do not contain any chemical which could be irritant to a baby’s skin.

MINIMAC

As the MINIMAC is used for the smallest babies, it is likely to need cleaning more frequently than the MULTIMAC.....

Initially, warm soapy water should be used, and eventually the cover can be removed completely and put in a washing machine on a warm wash.

It will not shrink, and the only limitation to machine washing is that it eventually removes the fire retardant from the material, so should not be done frequently.

The Aluminium construction of the MINIMAC will ensure that it has a long life, and may be used for successive babies, so we recommend that after a couple of years of washing, the cover be replaced with a new one; available from MULTIMAC.

9.3 TETHER STRAPS

The Tether straps hold the MULTIMAC and your children safely in the car.

They are considerably stronger than necessary, but only if kept in good condition.

Check frequently that they can move freely, and are not becoming frayed or worn.

Check that the closing nut on the **Maillon** remains tight.

Check that the **Eyebolts** are still tight, and the hole through them is still horizontal



10. CRASH DAMAGE

Like many modern vehicles, the Multimac has been designed specifically to deform and absorb energy in a crash, thus reducing the stress and loadings on the child.

In a very extreme crash, therefore, the main aluminium structure will bend slightly and the energy-absorbing legs will bend upwards.

If you have such a severe crash and the Multimac deforms in this way to protect your child, it should then be destroyed and replaced.

If you have notified your insurance company that you have a MULTIMAC fitted (section 2.1) this will be automatically covered.



www.multimac.co.uk Tel: 0121 44 22 007 Fax: 0121 44 22 057



The Multimac fitted in a Volvo showing a combination of 'TOMMY' and 'YLVA' headrests and Minimac baby cradle.



The Multimac fitted in a Fiesta showing detachable 'YLVA' side support head rests.



11. FITTING LIST

The MULTIMAC is approved as a "semi-universal" CRS [child restraint system] which means it does not fit all cars, and we have to give a specific list of which model MULTIMAC will fit each car. Generally, it will not fit into the 2-door or 3-door versions of each model: only the 4 or 5-door.

Normally, the eyebolts simply replace the existing central seat belt mounting bolts, and the Tether-straps are attached to them. However, in some cars the original "rigid" adult buckles have to be replaced with webbing-buckles as described in section 5.1, and these will be supplied with the MULTIMAC .

The initial list of cars follows here: it will be updated regularly on the website www.multimac.co.uk

Manufacturer	Model		Multimac Model				Eyebolt	Webbing Buckles if required
			1320	1260	1200	1000		
Audi	A8	03-	•	•	•	•	7/16"x45mm	—
	A6 Saloon	95-04		•	•	•	7/16"x35mm	—
	A6 Avant	95-04		•	•	•	7/16"x35mm	—
Bentley	Continenta Flying Spur	05-	•	•	•	•	7/16"x45mm	—
BMW	3 Series E46 4-Door Touring	98-05		•	•	•	M12x30 M12x30	— —
Ford	Fiesta	08-			•	•	M12x35	Standard 250mm
	Fiesta	02-08			•	•	M12x35	—
	Fusion	02-			•	•	M12x35	Standard 250mm
	Focus 5dr	98-04	•	•	•	•	M12x35	Standard 250mm
	Focus Estate	98-04	•	•	•	•	M12x35	Standard 250mm
	Focus 5dr	04-	•	•	•	•	M12x35	Standard 250mm
	Focus Estate	04-	•	•	•	•	M12x35	Standard 250mm
	Mondeo	00-07	•	•	•	•	M12x35	Standard 250mm
	Estate	00-07	•	•	•	•	M12x35	Standard 250mm
	Mondeo	07-	•	•	•	•	M12x35	Standard 250mm
	Estate	07-	•	•	•	•	M12x35	Standard 250mm
Lexus	GS 300	05	•	•	•	•	7/16"x30	3xD89 250mm
	LS 450	07	•	•	•	•	7/16"x30	3xD89 250mm

Manufacturer	Model		Multimac Model				Eyebolt	Webbing Buckles
			1320	1260	1200	1000		
Mercedes	E Class W124	86-95	•	•	•	•	7/16"x35mm	—
	E Class W210	96-03	•	•	•	•	7/16"x35mm	—
Peugeot	207 5dr	06-			•	•	M12x35	Standard 250mm
	307 5dr	01-07		•	•	•	M12x35	Standard 250mm
	308 5dr	08-		•	•	•	M12x35	Standard 250mm
	407 40	04-			•	•	M12x35	Standard 250mm
	407 SW	04-			•	•	M12x35	Standard 250mm
Toyota	Prius	04-			•	•	7/16"x30	—
	Avensis Saloon	03-		•	•	•	7/16"x30	—
	Avensis Estate	03-		•	•	•	7/16"x30	—
	Auris	07-			•	•	7/16"x30	—
Vauxhall	Astra 5dr	04-		•	•	•	7/16"x35mm	3xD89 250mm
	Astra Estate	04-		•	•	•	7/16"x35mm	3xD89 250mm
Volkswagen	Polo 5dr	02-			•	•	7/16"x35	—
	Golf 5dr	97-04		•	•	•	7/16"x40	—
	Golf 5dr	05-		•	•	•	7/16"x50	—
	Passat Saloon	05-		•	•	•	7/16"x40	—
	Passat Estate	05-		•	•	•	7/16"x40	—
Volvo	S40	04-			•	•	M12x35	Standard 250mm
	V50	04-			•	•	M12x35	Standard 250mm
	V70	00-07	•	•	•	•	M12x35	Standard 250mm
	V70	08-	•	•	•	•	M12x35	Standard 250mm
	S80	98-06	•	•	•	•	M12x35	Standard 250mm
	S80	07-	•	•	•	•	M12x35	Standard 250mm