



MILFORD INDUSTRIES
 C A R G O B A R R I E R
 PART NO. 603700

RAV 4 5door (Model SXA11) CARGO BARRIER
 MANUFACTURED FROM - APRIL 1994 – MAY 2000
Excluding All Sunroof Models

This Cargo Barrier was designed to be installed in either the front or rear position. The Cargo Barrier can be fitted directly behind the second row of seats when they are folded up against the back of the front seats for front position mounting, while rear position mounting allows the Cargo Barrier to be fitted behind the second row of seats in their upright position. The installation kit contains sufficient components for installation to both locations.

A high degree of technical competence is necessary to correctly install this product. Therefore, it is strongly recommended that a Toyota Dealer install this product. These Instructions must be read and clearly understood before commencing installation.

WARNING

This product has been designed to provide additional safety for the occupants. Passengers must never travel in the goods carrying area of the vehicle or behind the Cargo Barrier.

Should the Cargo Barrier become deformed (e.g., in the event of a collision) replace the cargo barrier and anchorage points and have the area around the anchorage points inspected for damage by a Toyota Dealer and repaired if necessary.

Failure to install the Cargo Barrier in accordance with these instructions may render the Cargo Barrier unable to withstand its rated capacity.

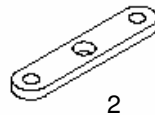
NOTE - To fit the cargo barrier it is essential that:

- (a) Before marking or drilling, determine whether a single or dual position fitting is required and mark the vehicle accordingly.
- (b) A positive drill stop should be used to prevent accidental damage to external panels, fuel lines etc. Always drill at right angle to surface being drilled.
- (c) A vinyl cutter should be used for all soft material (i.e. hood lining, floor covering etc.) This can be made by grinding the teeth from a holesaw at an angle of about 45 degrees.
- (d) CARE must be taken when applying Tekote Sealer / Rust Preventative to all holes drilled. Do not allow Tekote to come in contact with skin, as the possibility of SKIN IRRITATION may occur.
- (e) Test fit screws in relevant components by hand before installation. Should there be resistance re-tap threads and re-check.

CARE SHOULD BE TAKEN NOT TO CROSS THREAD THE FASTENERS DURING FITMENT OF COMPONENTS TO THE VEHICLE.

TOYOTA RAV4 - 5 door CARGO BARRIER PARTS LIST

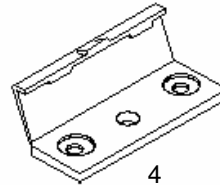
<u>Item No</u>	<u>Component No.</u>	<u>Qty</u>	<u>Component Description</u>
1	603965	1	Cargo Barrier Panel (Not Shown)
2	754000	6	Mounting Plate
3	754010	4	Black Plastic Cover Plate
4	754075	2	Top Cover Plate (Concealed Type)
5	904020	2	Mounting Plate Seal
6	754080	2	Metal Cover Plate
7	906300	1	Tekote Sealer / Rust Preventative (Not Shown)
8	912000	8	$\frac{5}{16}$ " BSW x 1" CSK Screw
9	912310	4	$\frac{5}{16}$ " BSW x 1 $\frac{1}{2}$ " CSK Screw
10	904000	2	Trim Plug
11	912015	4	M10 x 1.5 x 25 Pan Head
12	912020	2	M10 x 1.5 x 35 Pan Head
13	754245	4	Spacer Tube
14	912035	4	M10 x 1.5 x 25 Wing Bolt
15	912045	2	M10 x 1.5 x 35 Wing Bolt
16	932125	4	3/8" Crinkle Washer
17	754200	1	Installation Tool



2



3



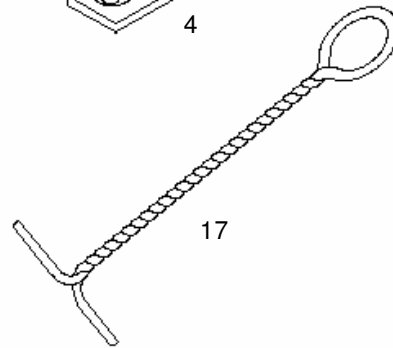
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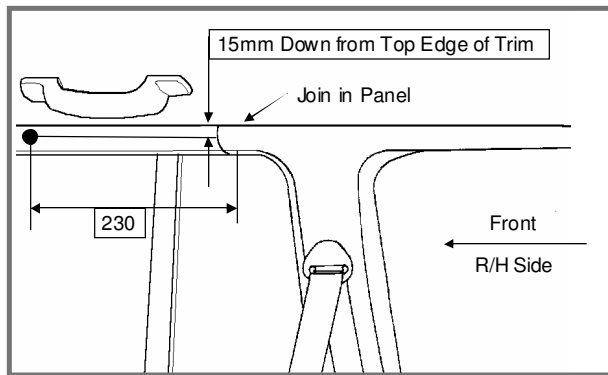


Figure 1

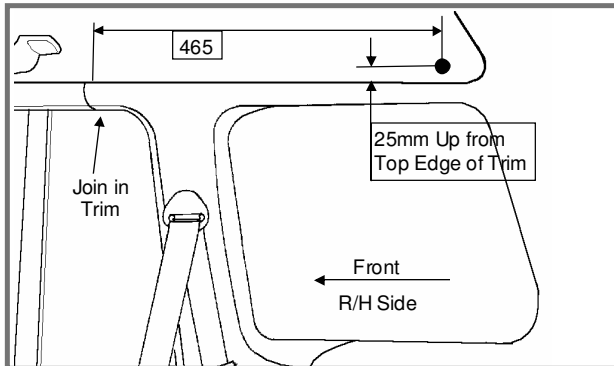


Figure 2

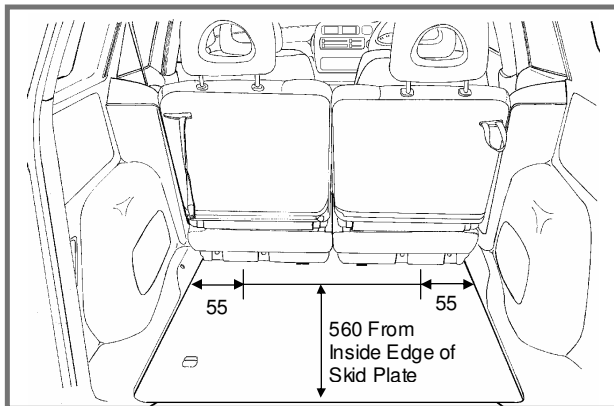


Figure 3

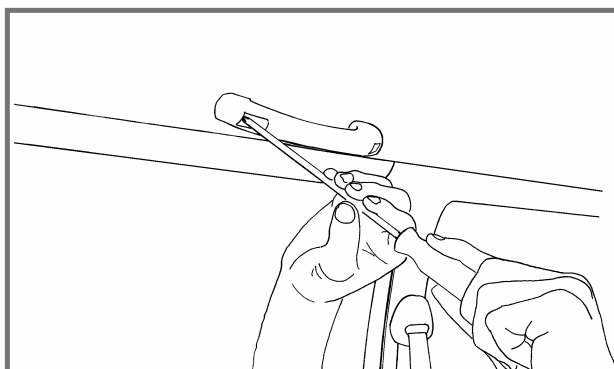


Figure 4

1. FRONT POSITION - TOP MOUNT LOCATION

- From the join in the hard moulded trim above the rear door, measure 230mm forward.
- From the top edge of the hard moulded trim, measure 15mm down.
- This is the mounting plate centre (M10) hole location.
- Mark with a felt tip pen.
- Repeat for left hand side.

2. REAR POSITION - TOP MOUNT LOCATION

- From the join in the hard moulded trim above the rear door, measure 465mm towards the rear.
- From the top edge of the hard moulded trim, measure 25mm up onto the soft roof trim.
- This is the mounting plate centre (M10) hole location.
- Mark with a felt tip pen.
- Repeat for left hand side.

3. FLOOR MOUNT LOCATION

- Fold the rear seats forward and move the floor covering away to allow accurate measuring and ease of mounting plate installation.
- From the inside front edge of the skid plate, measure 560mm forward.
- From the toe (inside edge) of the plastic moulded side trim, measure 55mm towards the centre of the vehicle.
- These points should locate in the centre of the raised section of rib indentations and are the mounting plate centre (M10) hole locations.
- Mark with a felt tip pen.

4. FIRST STAGE DRILLING FOR TOP FRONT CENTRE HOLE

- Ensure a suitable drill stop is in use at all times. Set at **25mm DEPTH**.
- For the top front location only, drill through both the moulded trim and metal cantrail with a 5mm pilot hole. Use of Drill Stop Essential.
- Having drilled these centre pilot holes only, unclip the hard moulded trims around the top of both rear doors.
- Remove grab handles above trims.
- Adjust the seat belt to the highest location.
- Raise moulded trims and expose pilot holes in metal cantrail.

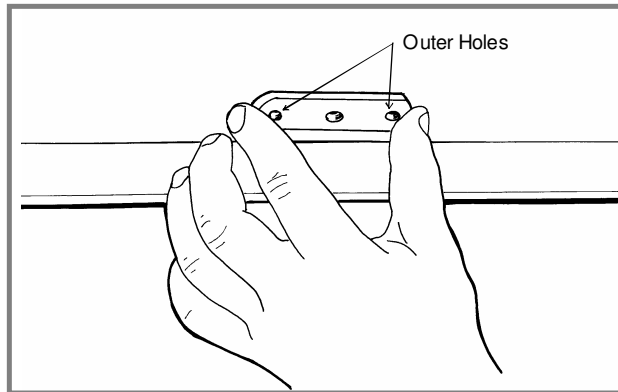


Figure 5

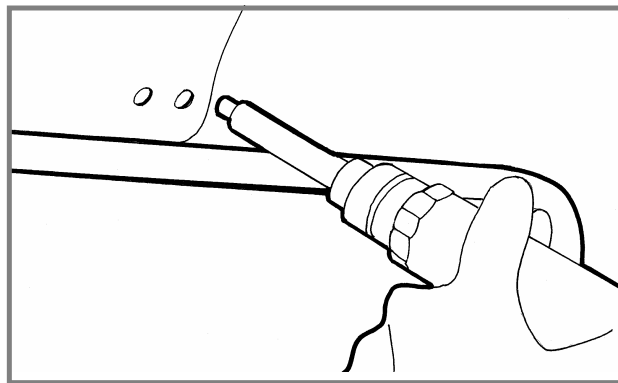


Figure 6

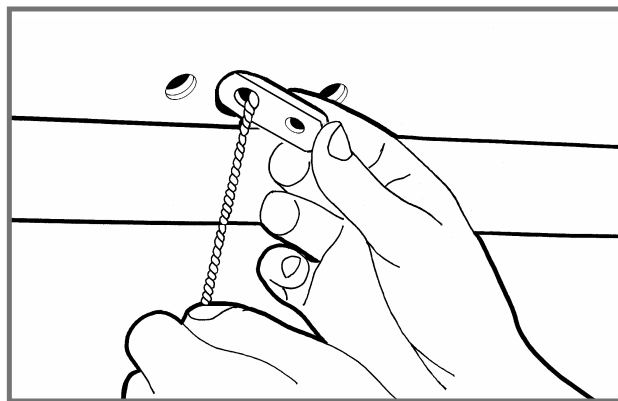


Figure 7

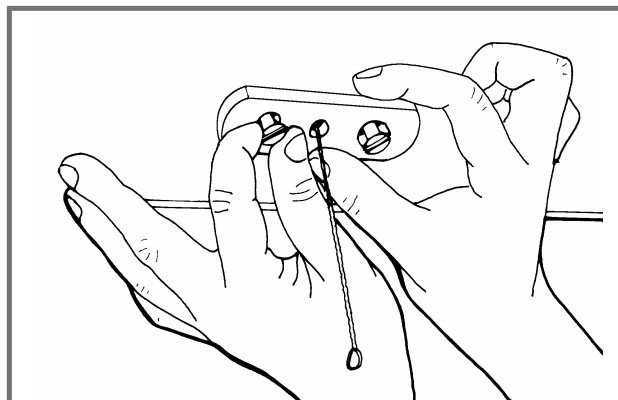


Figure 8

5. MARK MOUNTING PLATE OUTER HOLES.

- Using a mounting plate (Item 2) as a template, place the centre M10 hole over the location points outlined in Steps 1 to 4.
- Mark the outer holes as follows:
 - TOP MOUNTS - Horizontally
 - FLOOR MOUNTS - Parallel to side trims.

6. DRILLING PROCEDURE

- Centre punch all remaining marked points.
- Ensure a suitable drill stop is in use at all times. Set at **25mm DEPTH**.
- Drill a 5mm pilot hole through body panel, at all remaining marked points. Use extreme **CAUTION** and do not penetrate any external panels. Use of Drill Stop Essential. .
- Use a 22mm vinyl cutter to remove the hood lining material only for all top mounts. Do not penetrate any metal panels with the vinyl cutter.
- Re-drill (Outer holes only) to 9mm
 - Note:** When drilling the front holes of top rear mounts, it is necessary to continue drilling through the second panel inside the cavity. This is to allow the $\frac{5}{16}$ " BSW screw to pass through the second panel when tightened. Use **EXTREME CAUTION** not to drill through outer panel of vehicle.
- Re-drill all top centre points ONLY using a 22mm holesaw.
- Change to an 11 mm drill bit.
- Re-drill the floor centre points ONLY to 11 mm.
- Re-drill pilot holes through moulded rear trims (removed in step 4) to 11mm.
- APPLY Tekote Sealer/Rust Preventative (Item 7) to all holes drilled in metal panels.

7. TOP FRONT MOUNT INSTALLATION

- Insert the eye of the installation tool (Item 17) into the centre M10 hole of the mounting plate (Item 2).
- Push the mounting plate through the 22mm hole in the body panel.

8. TOP FRONT MOUNT INSTALLATION ..Continued

- Holding mounting plate in position, insert the eye of the installation tool into the centre hole of the black plastic cover (Item 3).
- With the outer holes aligned, insert the $\frac{5}{16}$ " BSW x 1 " CSK screws (Item 8) and secure all components firmly into position but DO NOT DISTORT black plastic cover plate.
- Remove installation tool and re-set ends to 90° between each installation.
- Ensure M10 centre thread is aligned correctly.
- Replace moulded rear door trims (removed in step 4) and ensure M10 centre thread is aligned correctly.

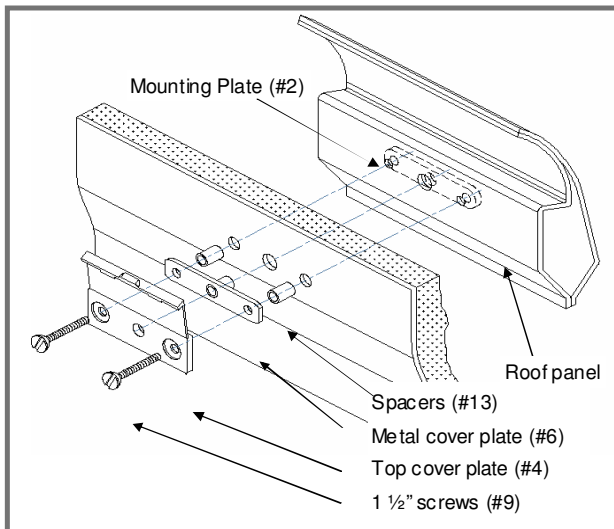


Figure 9

9. TOP REAR MOUNT INSTALLATION

- Insert the eye of the installation tool (Item 17) into the centre M10 hole of the mounting plate (Item 2).
- Push the mounting plate through the 22mm hole in the body panel.
- Holding mounting plate in position, slide the centre hole of the metal cover plate (Item 6) over the eye of the installation tool (Item 17) so that the tube on metal cover plate (Item 6) faces towards the 22mm hole.
- Align the loose spacer tubes (Item 13) with the outer holes.
- Slide the centre hole of the top cover plate (Item 4) over the eye of the installation tool (item 17).
- With the outer holes aligned, insert the $\frac{5}{16}$ " BSW x 1 1/2" CSK screws (Item 9) and secure all components firmly into position.

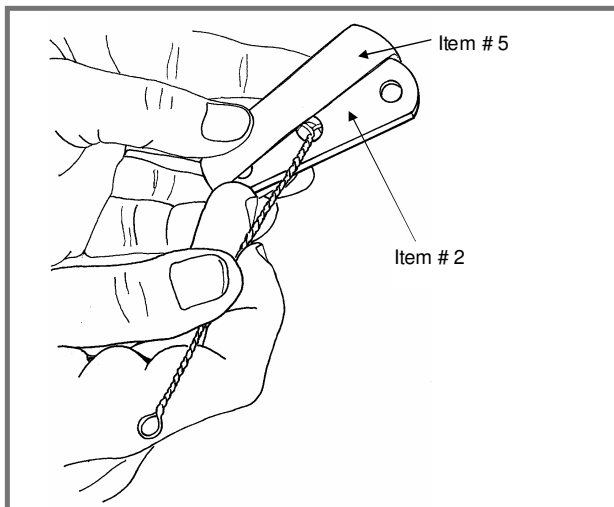


Figure 10

10. FLOOR MOUNT INSTALLATION

- Insert the eye of the installation tool (Item 17) into the centre M10 hole of the mounting plate (Item 2).
- Fit a mounting plate seal (Item 5) to the mounting plate (Item 2).
- Push the eye of the installation tool (Item 17) through the 11mm hole in the floor panel from under the vehicle..
- Holding mounting plate in position, slide the centre hole of the black plastic cover plate (Item 3) over the eye of the installation tool (Item 17).
- With the outer holes aligned, insert the $\frac{5}{16}$ " BSW x 1" CSK screws (Item 8) and secure all components firmly into position but DO NOT DISTORT black plastic cover plate.
- Thoroughly Clean/Vacuum all drilling swarf.
- Replace floor covering.
- Using a 22mm vinyl cutter, drill a hole through the floor covering in line with the centre (M10) floor mounting locations.
- Ensure M10 centre thread is aligned correctly.
- Refit the grab handles removed in Step 4.

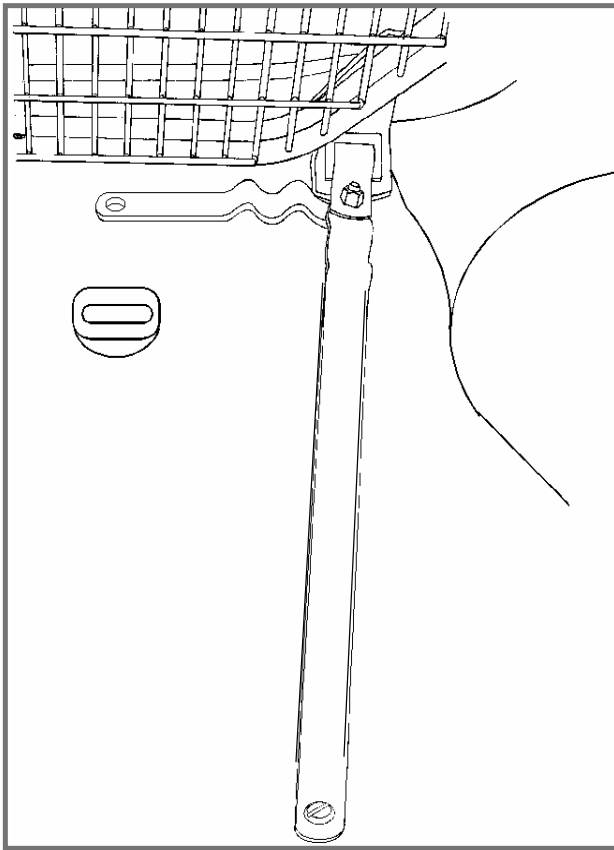


Figure 11

11. FRONT POSITION INSTALLATION OF CARGO BARRIER

- Fold second row of seats forward as outlined in the vehicle owner's handbook.
- Stand the Cargo Barrier assembly (Item 1) in position directly behind the folded second row of seats.
- The Cargo Barrier's compliance plate must be in the top left hand corner and facing towards the rear of the vehicle.
- Using M10 x 1.5 x 25mm pan head bolts (Item 11) and crinkle washers (Item 16), attach the top straps to the top front mounts.
- Using M10 x 1.5 x 25mm pan head bolts (Item 11) and crinkle washers (Item 16), attach the longer bottom straps to the floor mounts.

CHECK THAT ALL BOLTS, NUTS AND SCREWS / TIGHT AND RE-CHECK PERIODICALLY.

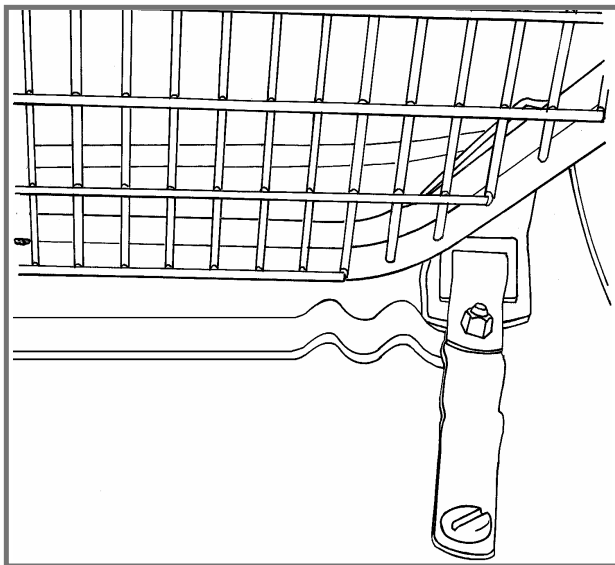


Figure 12

12. REAR POSITION INSTALLATION OF CARGO BARRIER

- With the second row of seats in an upright position, stand the cargo barrier assembly (Item 1), directly behind.
- The Cargo Barrier's compliance plate must be in the top left hand corner and facing towards the rear of the vehicle.
- Using M10 x 1.5 x 35mm pan head bolts (Item 12) and crinkle washers (Item 16), attach the top straps to the top rear mounts.
- Using M10 x 1.5 x 25mm pan head bolts (Item 11) and crinkle washers (Item 16), attach the shorter bottom straps to the floor mounts.
- For ease of dual position movement, this fitting kit also contains M10 wing-bolts (Items 14 and 15). These can be used as alternative fasteners (Replacing Items 11 and 12) when installing the cargo barrier in position.
- The fitting kit also contains trim plugs (Item 10) which can be inserted in the exposed top front mounting holes..

CHECK THAT ALL BOLTS, NUTS AND SCREWS / TIGHT AND RE-CHECK PERIODICALLY.