



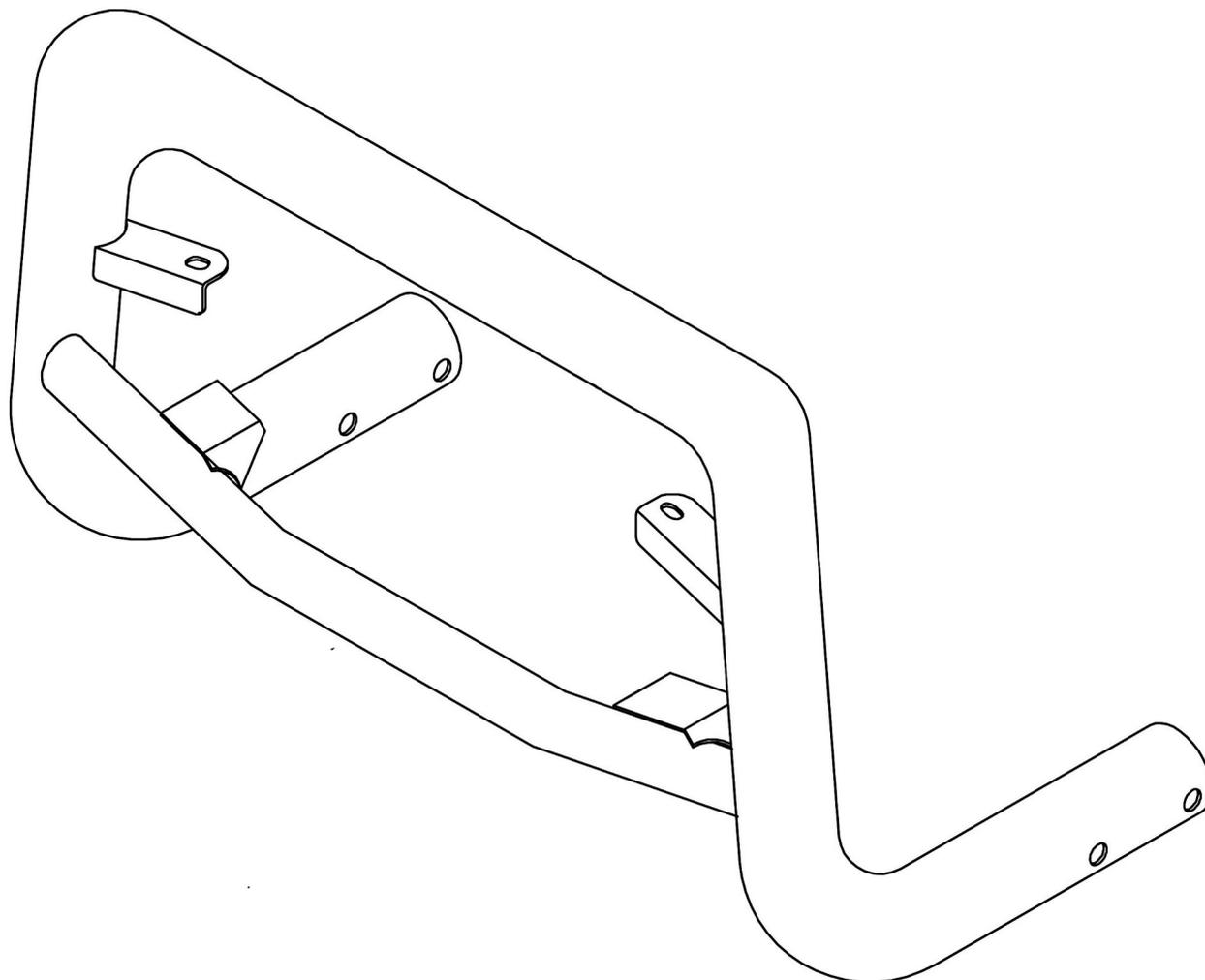
ADVANTAGE

# TOYOTA



Environment  
ISO 14001

## Fitting Instruction



<b>Vehicle Model:</b>	TOYOA PRADA 03– STD ALLOY NUDGE
<b>Accessory Part Number:</b>	48P0A
<b>Fitting Time:<sup>†</sup></b>	2:00 hours      TWO PEOPLE LIFT RECOMMENDED TO MINIMISE RISK
<sup>†</sup> Fitting Time includes the time to fit the accessory and is provided only as a guide. Time to process the vehicle and fit other items has not been included.	
<b>Disclaimer:</b>	All images are intended for graphical representation only. Subsequent releases of both accessories and vehicles may have occurred since publication of this document.



# TOYOTA

## Notes and Cautions

### General:



Carefully read all instructions before attempting to fit this accessory. Failure to do so may cause serious injury or death and/or may damage the vehicle or accessory.



For correct installation, proper operation and to ensure warranty is maintained, the accessory must be installed by a qualified Technician. Ensure all automotive and dealership safety practices are followed.



Recycle all packaging and discarded components.

### Vehicle:



Inspect the vehicle and note any damage prior to fitment. Inform the customer of any damage or concerns that might interfere with the installation before fitting the accessory.



Protect and safely store any components removed from the vehicle.



All warranties will be void unless all bare metal surfaces are protected using automotive bare metal primer and two coats of touch-up paint or suitable soft seal compound with rust inhibitor. The distributor and the manufacturer cannot accept responsibility if bare metal surfaces are not reasonably protected.



Ensure all metal swarf and dust is removed from all vehicle surfaces.

### Accessory:



Fixings must be checked and tightened to the specified torque at every service.



Seek assistance when lifting heavy components.



Do not repair or modify this accessory as this will void the warranty.



This accessory is to only be used on vehicle models sold new in New Zealand and Australia. It may be unsafe to install this accessory on any other vehicle.



Grease must never be used when installing this product. All torque settings relate to dry joints.



This nudge bar is **SRS AIR BAG COMPATIBLE**, and was manufactured in accordance with ADR 69/00, ADR 73/00 and TMC Japan Front Air Bag deployment criteria. Do not modify or repair the nudge bar and mounting brackets in any way. Modification or repair may result in non compliance with above ADR regulations and may effect proper operation of air bags resulting in injury.



Do not remove the nudge bar label.

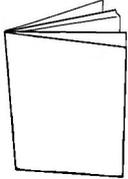
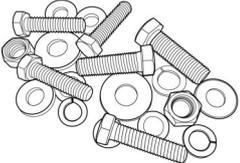
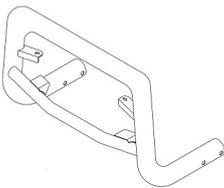
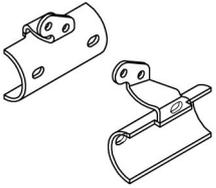
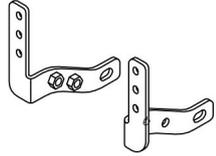
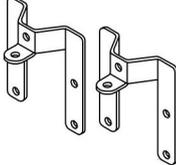
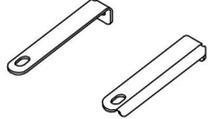
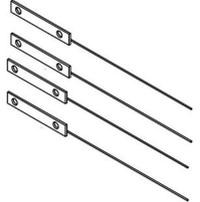
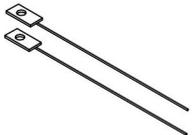
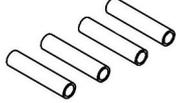


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## Kit Contents

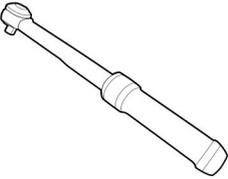
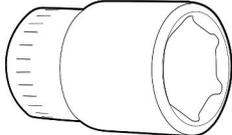
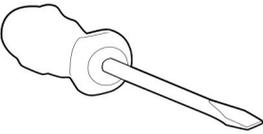
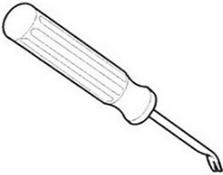
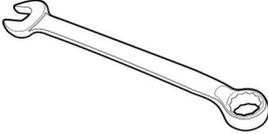
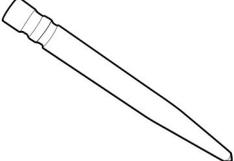
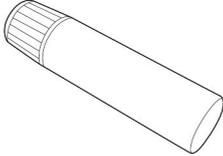
Fitting Instructions	Fit Kit	Nudge Bar	Lower Mount Brackets
			
Lower Support Mounts	Bumper Reinforcement Mounts	Upper Stays	120mm Long Plates
			
40mm Long Plates	16mm OD Tube Spacers		
			

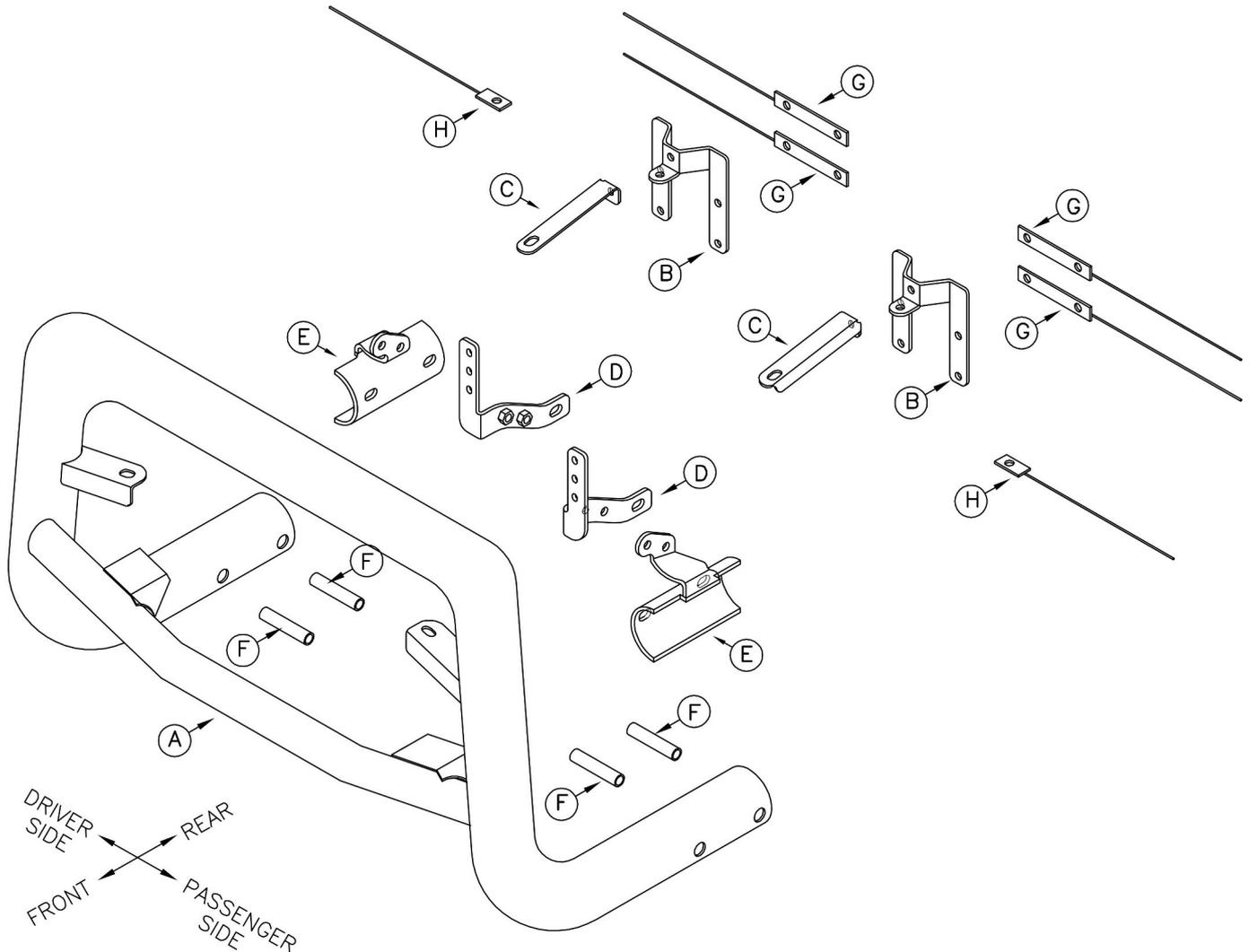
\* Check the contents of the kit is complete prior to fitment. Parts must be replaced using specific components if the kit is incomplete or damaged.



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## Tool List

Torque Wrench	Safety Glasses	Bumper Stand	Socket Set 8
			
Screwdriver Flat	Trim Remover	Ring Spanner 27mm	Drill
			
Centre Punch	Touchup Paint		
			



(A)	ALLOY NUDGE BAR	(48POA)	x1
(B)	BUMPER REINFORCE UPER MOUNTS		x2
(C)	UPER STAY		x2
(D)	LOWER SUPPORT MOUNTS		x2
(E)	LOWER MOUNTING BRACKET		x2
(F)	Ø16mm OD TUBE SPACERS 75mm LONG		x4
(G)	20x120mm PLATES WITH WIRE WELED		x4
(H)	20x40mm PLATES WITH WIRE WELED		x2
(1)	M6x25 SET SCREWS BLACK ZINC	(0214)	x10
(2)	M6 HEAVY WASHERS	(021T)	x10
(3)	M6 SPRING WASHERS	(021U)	x10
(4)	M6 U NUTS	(021V)	x10
(5)	M8x25 FLANGE BOLTS BLACK ZINC	(022V)	x2
(6)	M10x30 BOLTS	(0244)	x4
(7)	M10x100 BOLTS	(024G)	x4
(8)	M10 FLAT WASHERS	(024S)	x14
(9)	M10 SPRING WASHERS	(024U)	x8
(10)	M10 NUTS	(024X)	x4
(11)	M12x30x1.25 BOLTS	(02AE)	x2
(12)	M12 FLAT WASHERS	(026S)	x2
(13)	M12 SPRING WASHERS	(026U)	x2
(14)	M10x25 BOLTS BUTTON HEAD	(025H)	x2
(15)	M10 FLAT PENNY WASHERS	(024R)	x2
(16)	M10 NYLOC NUTS	(02D0)	x2

- \* M6 TORQUE SETTING 9Nm OR 7Ft.Lbs
- \* M8 TORQUE SETTING 22Nm OR 16Ft.Lbs
- \* M10 TORQUE SETTING 44Nm OR 32Ft.Lbs
- \* M12 TORQUE SETTING 77Nm OR 57Ft.Lbs

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## Fitting Instruction

1. Inspect the vehicle, front nudge bar and components of the kit for damage and correct contents.
2. Protect the front of the vehicle to prevent damage.
3. Remove vehicle front bumper cover according to applicable vehicle repair manual. Unplug the fog lights if applicable.
4. Remove the front bumper cover energy absorber and front bumper cover reinforcement bar (unbolt the front bumper cover reinforcement bar from the front bumper cover reinforcement extension sub assemblies) according to the applicable vehicle repair manual.
5. Align supplied paper template (different between driver and passenger) to rear side of bumper reinforcing bar (Diagram 1) and drill  $\varnothing 8$  mm hole as specified on templates. Repeat procedure for other side.

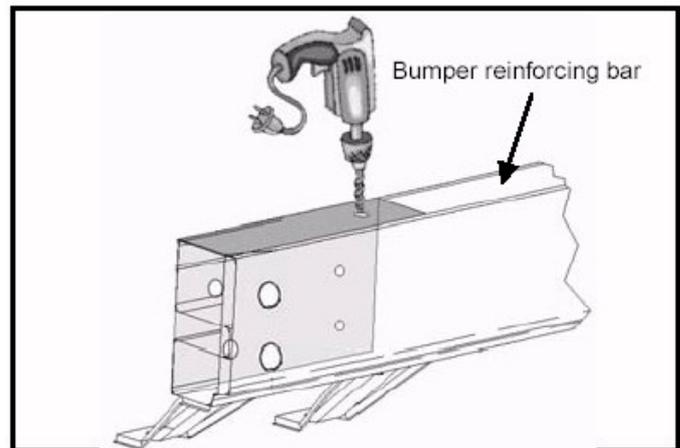
**NOTE:**

The reinforcement bar **MUST** be removed off the chassis reinforcement extension sub assemblies to be able to apply the paper template correctly.

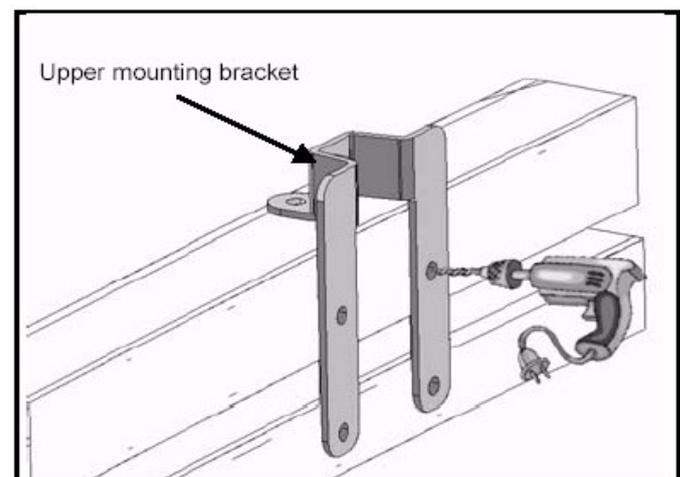
6. Using the supplied nudge bar upper mounting bracket as template, drill four  $\varnothing 8$ mm holes into the back of the front bumper cover reinforcing bar. Repeat procedure for other side of the vehicle. Refer (Diagram 2).

**NOTE:**

The reinforcement bar **MUST** be removed off the chassis reinforcement extension sub assemblies to be able to drill the holes correctly. After the drilling process please debur all drilled holes and apply touch up paint to the exposed metal.



**Diagram 1:** Drilling template for upper mounting brackets (RHS shown)



**Diagram 2:** Drilling of back of bumper reinforcing bar (RHS shown)

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## Fitting Instruction

7. Re-install the front bumper cover reinforcement bar to the front bumper cover reinforcement bar extension sub assemblies and torque to correct settings according to the applicable vehicle repair manual. Reverse the procedure in step (4).
8. Install (x10) M6 U Nuts (Item 4) to plates (Item G & H).
9. Install and tighten to specified torque (x2) supplied nudge bar upper reinforcing mounts (Item B) to the front bumper cover reinforcement bar rear face using (x6) prepared (step 8) plates (Item G & H) and (x10) M6 BLACK bolts (Item 1), (x10) spring washers (Item 3) and (x10) HEAVY washers (Item 2). Refer (Diagram 3).

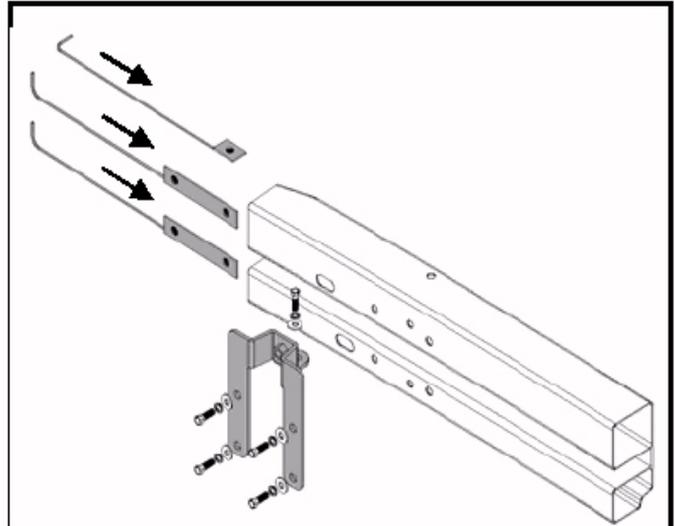
**NOTE:**

Tightening torque M6 bolt: 9Nm

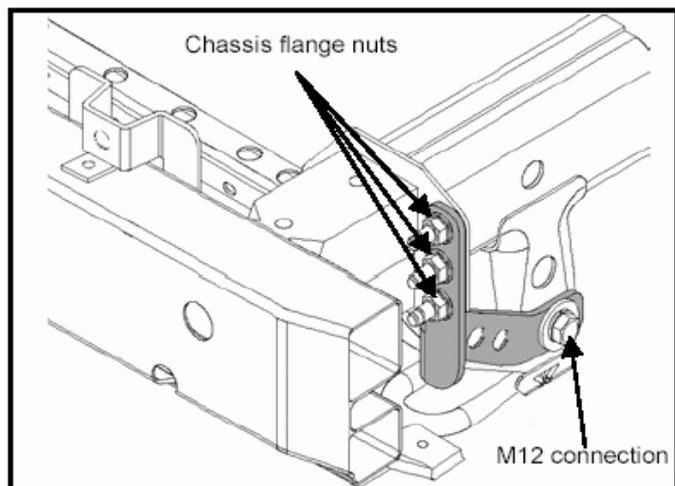
10. Remove the (x6) outer chassis flange nuts from the driver and passenger sides of the chassis extension sub assemblies. Refer (Diagram 4).
11. Install (x2) supplied nudge bar lower support mounts (Item D) over the existing chassis extension sub assembly studs. Refer (Diagram 4).
12. Reinstall the (x6) outer chassis flange nuts to the driver and passenger sides of the chassis extension sub assemblies. Do not tighten at this point.
13. Install the (x2) supplied nudge bar lower support mount M12 bolts (Item 11), (x2) spring washers (Item 13) and (x2) flat washers (Item 12) refer (Diagram 4) through the nudge bar lower support bracket into the chassis.

**NOTE:**

Ensure chassis flange is perpendicular to chassis rail. Adjust if necessary!



**Diagram 3:** Installation of nut plates (LHS shown)



**Diagram 4:** Installation of lower support bracket

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## Fitting Instruction

14. Torque the (x6) M10 nuts and (x2) M12 bolts as per below specification.

**NOTE:**

Tightening torque M10 Nut : 44Nm

Tightening torque M12 Bolt: 77Nm

15. Plug in the fog lights if applicable. Reinstall the vehicle front bumper cover according to the applicable vehicle repair manual.
16. Install (x2) supplied nudge bar lower mounting bracket (Item E) to the lower mounting points on nudge bar (Item A) using the (x4) supplied nudge bar tube Spacers (Item F), (x4) M10 bolts (Item 7), (x4) spring washers (Item 9), (x8) flat washers (Item 8) and (x4) M10 nuts (Item 10).

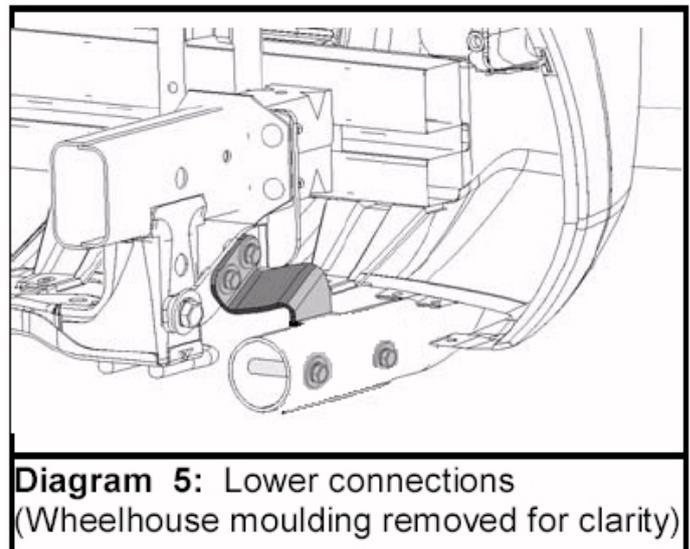
**NOTE:**

Do not fully tighten.

17. Install the assembled lower mounting brackets (Item E) and nudge bar (Item A) to the lower support brackets (Item D) on the chassis extension sub assemblies, using (x4) M10 bolts (Item 6), (x4) spring washers (Item 9) and (x4) flat washers (Item 8). Refer (Diagram 5).

**NOTE:**

Do not fully tighten.



**Diagram 5: Lower connections**  
(Wheelhouse moulding removed for clarity)

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## Fitting Instruction

18. Once the nudge bar and lower mounting bracket assembly has been attached to the vehicle install the (x2) supplied nudge bar upper stays (Item C) to upper reinforcing mounts (Item B) using the supplied nudge bar (x2) M8 BLACK HEAD bolts (Item 5).
19. Install the nudge bar upper stays (Item C) to nudge bar upper alloy mounting tabs, using (x2) M10 BUTTON HEAD bolts (Item 14), (x2) flat penny washers (Item 15), (x2) flat washers (Item 9) and (x2) M10 Nyloc nuts (Item 16).

**NOTE:**

Do not fully tighten.

20. Check for correct alignment of the nudge bar to the vehicle. Refer (Diagram 7).

**NOTE:**

Top of nudge bar to be horizontal.

21. Tighten all bolts and nuts installed in steps 14 to 17.

**NOTE:**

Tightening torque M8 bolt: 22Nm  
Tightening torque M10 bolt: 44Nm  
Tightening torque M12 bolt: 77Nm

**NOTE:**

- VFPS – Vehicle Frontal Protection System
- Do not attach VFPS (Nudge bars) to the vehicle using anchorages not intended for this purpose (e.g engine mounting bolts)
- Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer
- Do not remove the plaque or label from the VFPS
- Do not modify the structure of the VFPS in any way .

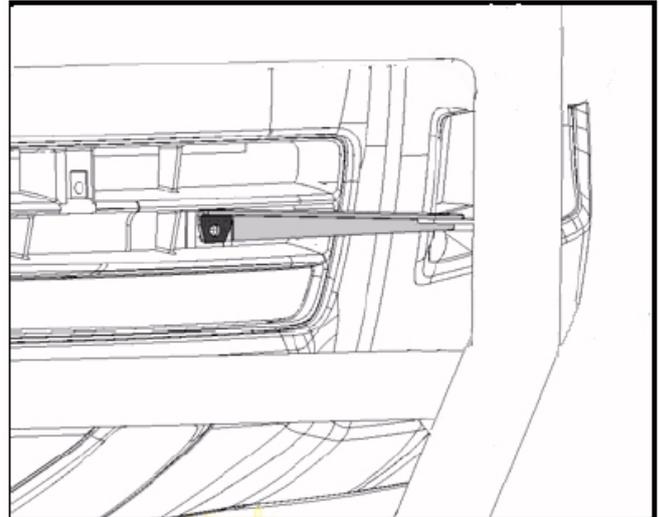


Diagram 6: Upper connections

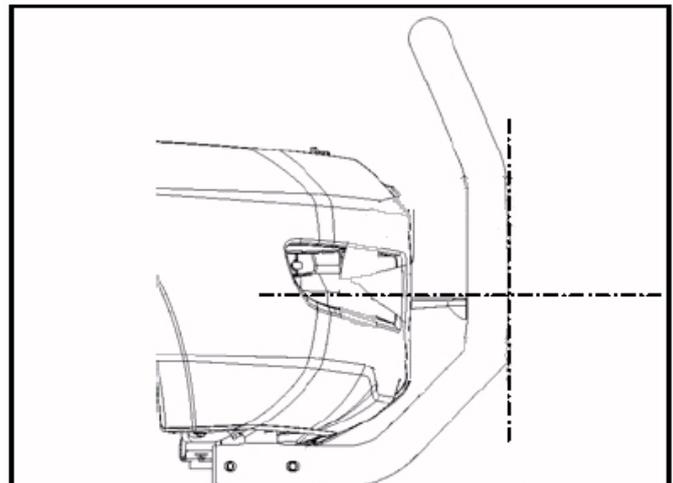


Diagram 7: Alignment check



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## Fitting Instruction

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### **CHECK ALL BOLTS ARE SECURE AND TORQUE TIGHTENED TO THE CORRECT SPEC**

- **Check** all the nudge bar bolts are secure and torque tightened to the specified torque at every scheduled service.
- **Torque Conversions** : 1 Nm = 10.2 kgf = 0.73 ft. Lbs
- **Use** "Touch up" paint primer and paint on any newly drilled holes and scratches to prevent corrosion.

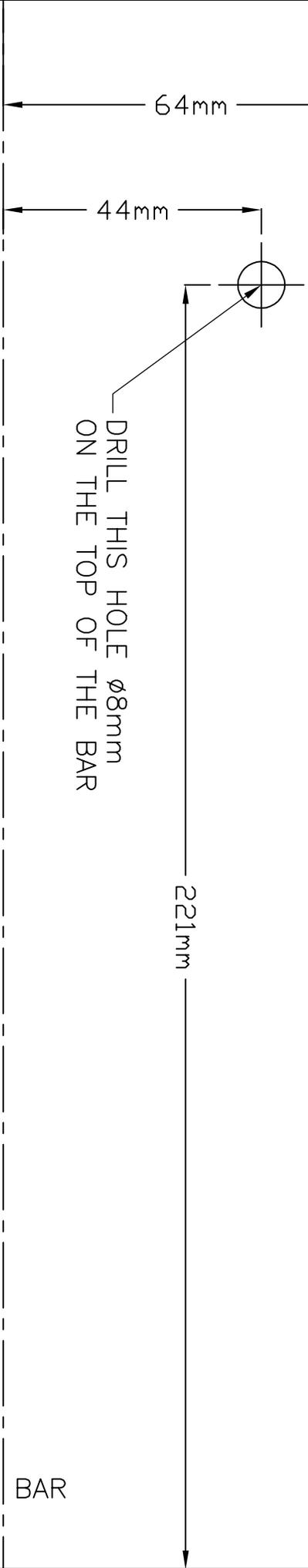
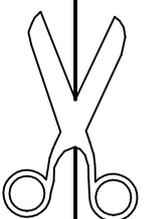
### **CAUTION!**

**This accessory has been designed for use on TOYOTA Vehicles first registered in New Zealand and may be unsafe if used on any other vehicle.**

Manufactured by BEST BARS Ltd Auckland New Zealand.

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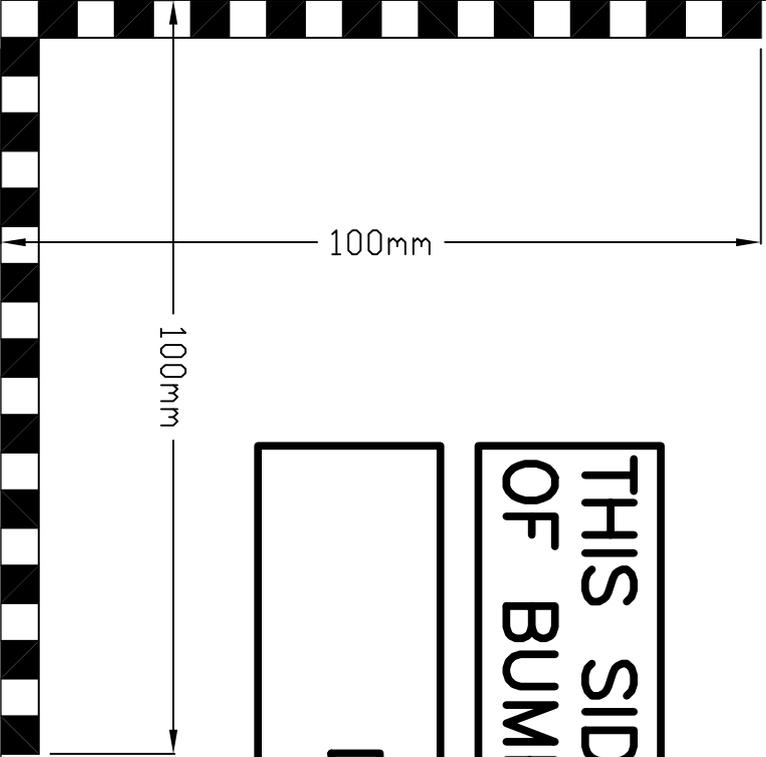
2005 TOYOTA PRADO 4WD ALLOY NUDDGE BAR  
DRIVER SIDE BUMPER REINFORCING BAR DRILLING TEMPLATE



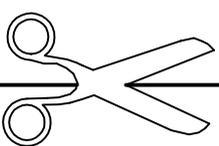
BEND DOWN TO 90°

**THIS SIDE TO THE REAR FACE  
OF BUMPER REINFORCEMENT BAR**

**DRIVER SIDE**

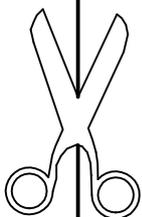


OUTER EDGE OF BUMPER REINFORCING BAR





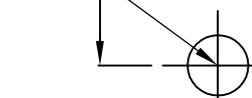
2005- TOYOTA PRADO 4WD ALLOY NUDDGE BAR  
PASSENGER SIDE BUMPER REINFORCING BAR DRILLING TEMPLATE



SHEET 9 OF 9

224mm

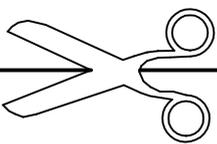
DRILL THIS HOLE  $\phi 8\text{mm}$   
ON THE TOP OF THE BAR



44mm

64mm

BEND DOWN TO 90°



OUTER EDGE OF BUMPER REINFORCING BAR

**THIS SIDE TO THE REAR FACE  
OF BUMPER REINFORCEMENT BAR**

**PASSENGER SIDE**

100mm

100mm

