

Accessory Part No.: PZQ44-89100



### HILUX

(Model code: GUN125R-C, GUN126-C, GUN125R-D, GUN126R-D, GGN125R, GUN136R-D)

**July 2015 Production Onwards** 

**Side Step Installation Instructions** 

### Accessory Part No. PZQ44-89100

Installation Time: Approx. 45 min



CAUTION—It is extremely important that bolts are tightened to the correct torques in the correct sequence (refer to lettering in the layout diagram and parts list).

It is important that the cross-member nuts are torqued, not the bolts.

At the end, check that all bolts are fully torqued as per the fitment instructions.

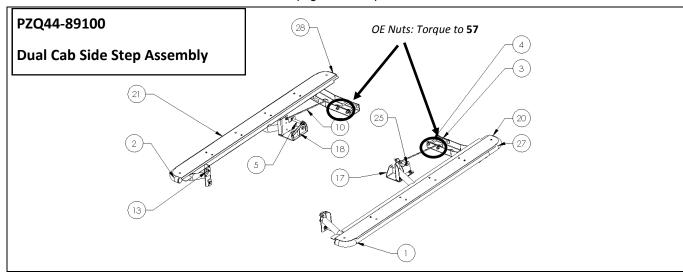
### Place these instructions in vehicle's glove box after installation is complete.



### Important:

- Read instructions carefully before installation install side step as described. Do not use any other mounting location/ method other than described in this instruction.
- Ensure that the weld nut assemblies are not inserted adjacent to brake lines
- It is advisable to seek assistance of another person when installing this product.
- Do not use this product in any other motor vehicle for which it is not designed.
- Do not repair or modify the side step and/or its mounting bracket in any way repair or modification may effect proper operation of the airbag resulting in serious injury.

#### See page 2 for the parts list



### **Tools Required:**

- 8,10,13,17,18,19mm Ring/Open Spanner
- Trolley Jack

Drill Bits 8.5mm, 10mm

- 8,10,13,17,18, 19mm Sockets
- Clear Polyurethane Glue
- Rust Inhibitor & Brush

Ratchet Wrench

- 1 Metre Rule or Straight Edge
- 4-77 Nm Capacity Torque Wrench
- Compact Power Drill

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**Parts List** 

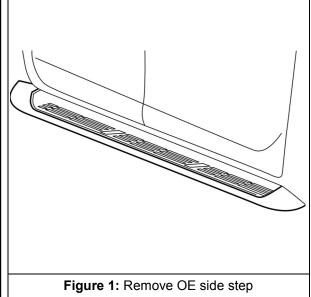
Important: Check contents of kit before commencing fitment and report and discrepancies.

Side Step PZQ44-89100 (Double Cab)				
Item	Component Name	Qty.	Torque (Nm)	Service Kit Part No.
1	Step Side RHS	1		
2	Step Side LHS	1		
3	Packer 8mm	4		
4	Bolt Hex Head M12 x 1.25P x 135	4		
5	Spacer Tube	2		
6	Washer Flat M12 x 26 x 4	4		
7	Screw Hex Head M8 x 1.25P x 30	10	22	
8	Washer Flat M8 x 26 x 4	22		
9	Nut Nyloc Hex Head M8 x 1.25P	8	22	
10	Weld Nut Assembly M8 x 1.25P	2		
11	Washer Flat M6 x 25 x 2.8	20		
12	Bolt Hex Head M8 x 1.25P x 35	2	22	
13	Spacer M8 x 20 x 10.4	2		
14	Screw Hex Head M10 x 1.5P x 40	2	44	
15	Washer Flat M10 x 25 x 4	4		
16	Nut Nyloc Hex Head M10 x 1.5P	2		
17	Right Angle Bracket RH	1		
18	Right Angle Bracket LH	1		
19	Shim 1mm	4		
20	Tread Plate RH	1		
21	Tread Plate LH	1		
22	Bolt Cup Head M6 x 1.0P x 25	20		
23	Nut Nyloc Hex Head M6 x 1.0P	20	4	
24	Bung Rubber	4		
25	Bolt Hex Head M12 x 1.75P x 130	2		
26	Nut Nyloc Hex Head M12 x 1.75P	2	77	
27	Bracket Horizontal RH	1		
28	Bracket Horizontal LH	1		

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For step 1 refer to the vehicle workshop manual

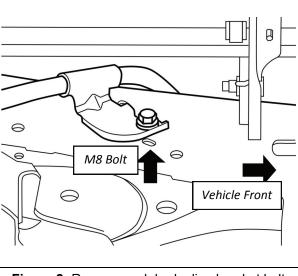


NOTE

Complete steps 1 - 27 for right hand side first, followed by left hand side. Item numbers listed in brackets () refer to left hand components.

## Step 1:

- If fitted, remove OE side step.
- Remove 6 x M8 fasteners from OE side step.
- Discard side step and fasteners.



Step 2:

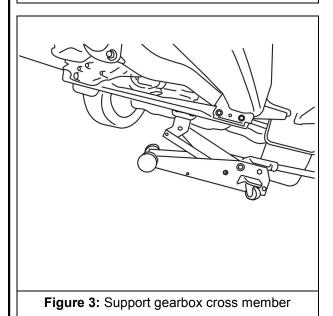
Remove M8 bolt from parking brake line bracket and discard.



**NOTE** 

View shown in figure 2 is of right hand chassis,

Figure 2: Remove park brake line bracket bolt



# Step 3:

Use a trolley jack to support gearbox cross member.

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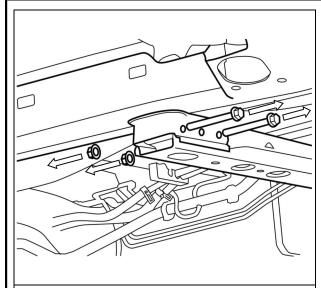


Figure 4: OE gearbox crossmember bolt removal

# Step 4:

- Remove 2 x M12 fastener sets from gearbox cross member as shown.
- Retain OE M12 hex nuts, discard OE M12 bolts.



CAUTION

Only remove crossmember bolts one side of the vehicle at a time with the crossmember



- Apply a wipe of clear polyurethane glue inside rear end of tube.
- Insert 1 x item 24 bung rubber into end of step frame.



**SAFETY** 

When using polyurethane glue, avoid breathing fumes and contact with skin

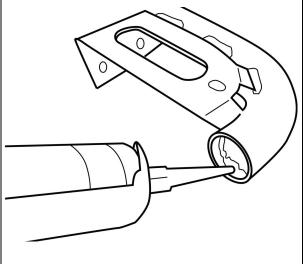
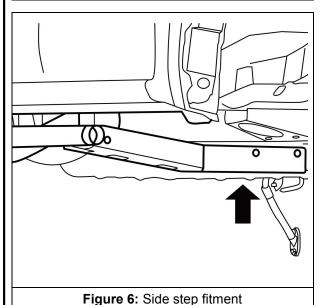


Figure 5: Installation of rubber bung



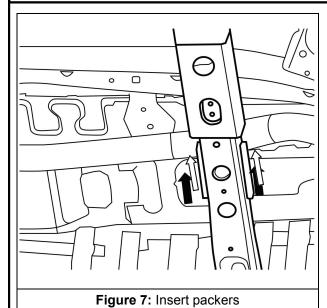
Step 6:

- Lift item 1 (2) side step RHS (LHS) into position ensuring the rear of the step is supported.
- Align the front bracket section over the transmission cross member.

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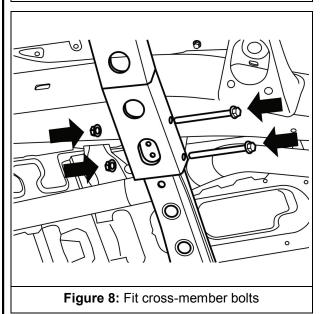
## Step 7:

 Insert 2 x item 3 Packer 8mm between the front bracket section and the transmission cross member.



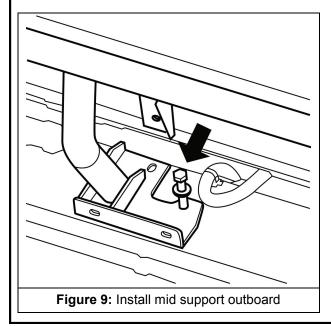
HINT

A large flat blade screwdriver can be used to lever and adjust bracket so shims can fit and align with holes in bracket and crossmember



# Step 8:

- Assemble step using 2 x item 4 Bolt Hex Head M12 x 135 and 2 x retained OE Nut Hex Head M12 as shown.
- Nip up fasteners, do not tighten at this stage.



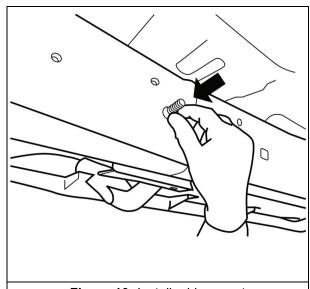
## Step 9:

 Insert 1 x item 25 Bolt M12 x 130 through 1 x item 6 Washer M12 through outboard side of mid support bracket on side step.

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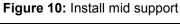
# **Step 10:**

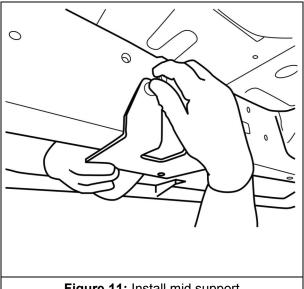
- Slide 1 x item 5 Spacer Tube over item 25 Bolt M12 x 130 from inboard side of chassis frame as shown.
- Ensure sleeve slides through completely until the end is flush with the outboard wall of the chassis



WARNING

Be careful not drop spacer tube into chassis frame.

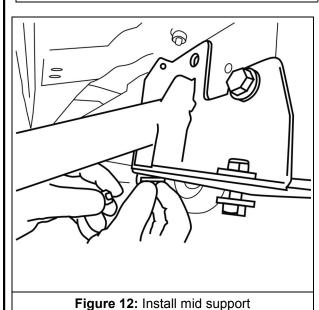




# **Step 11:**

- Assemble item 27 (28) Bracket horizontal RHS (LHS) over the M12 Bolt and Spacer Tube from inboard side of chassis frame
- Assemble 1 x item 6 Washer Flat M12 and 1 x item 26 Nut Nyloc M12 onto the M12 Bolt previously placed in Step 9.
- Nip up bolt, do not tighten.

Figure 11: Install mid support



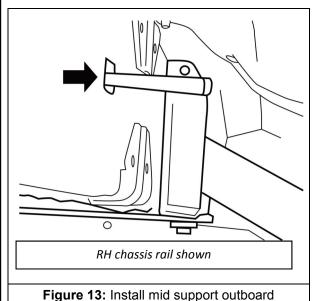
## **Step 12:**

- Attach the horizontal bracket to side step using 2 x item 7 Screw M8 x 30, 4 x item 8 Washer Flat M8, and 2 x item 9 Nut Nyloc M8 as shown.
- Nip up screws only do not tighten.

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## **Step 13:**

- Using the bending instructions on page 13, bend 1 x item 10
   Weld Nut assembly to match the diagram shown.
- Feed Weld Nut assembly through access hole on outboard side of chassis frame as shown rearward of the mount bracket and fasten using 1 x item 7 Screw M8 x 30 and 1 x item 8 Washer Flat M8.
- Nip up fastener only do not tighten.



**WARNING** 

Keep away from brake lines

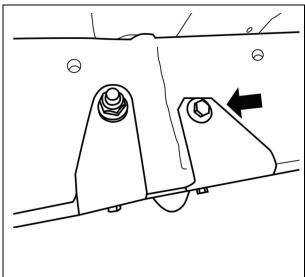


Figure 14: Install mid support inboard

# Step 14:

Fasten mid support on inboard side using 1 x item 7 screw M8 x 30 and 1 x item 8 washer flat M8, screwed into pre existing captive nut in chassis and nip up screw, do not tighten.

### **Step 15:**

- Assemble step rear mount bracket (upper joint) to chassis
  outboard over the OE park brake bracket, inserting 1 x item
  13 M8 washer spacer between the park brake bracket and
  step rear mount bracket, then securing with 1 x item 12 bolt
  M8 x 35 and 1 x item 8 washer flat M8 into chassis weld nut
  provided.
- Assemble step rear mount bracket (lower joint) to out board chassis face using 1 x item 14 screw M10 x 40, 1 x item 15 washer flat M10,
- Pass through the chassis dropper then secure inside with another 1 x item 15 washer flat M10 and 1 x item 16 nut nyloc M10 as shown.
- Nip up fasteners. Do not tighten at this stage.

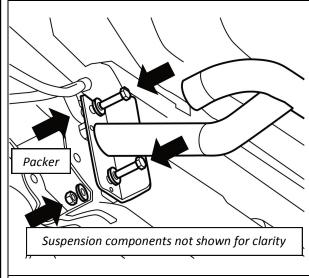


Figure 15: Install rear support



HINT

Use a large screwdriver through lower bracket hole to aid in positioning top hole alignment to insert M8 x 35 bolt.

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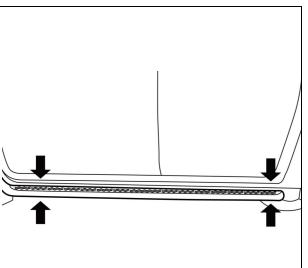


Figure 16: Tighten fasteners

# **Step 16:**

- Align side step to be parallel to vehicle sill.
- Tighten fasteners installed in steps 8-15 to values listed below.



Torque on M12x1.25P OE Nut Flange (Not bolt head M12



Bolt Flange Head M12 x 130 torque: 77 Nm



Screw M10 x 40 torque: 44 Nm



Screw M8 x 30 torque: 22 Nm

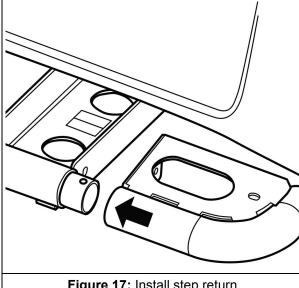


Figure 17: Install step return



NOTE

If fitting Side Rail PZQ44-89110 please refer to separate fitting instructions supplied with the

Steps 17-23 are for side step fitment ONLY. If NOT fitting PZQ44-89110 continue at Step 17

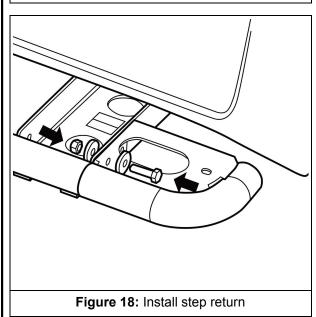
# **Step 17:**

- Apply a wipe of clear polyurethane glue to tube end and insert 1 x item 24 bung rubber into end of tube per step 5.
- Insert item 17 (19) right angle bracket RHS (LHS) into side step as shown.
- Take care not to mark vehicle surfaces.



NOTE

SAFETY: When using Polyurethane glue, avoid breathing fumes and contact with skin



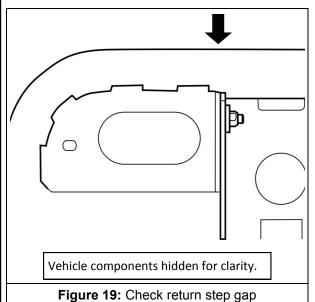
## **Step 18:**

- Connect using 1 x item 7 Screw M8 x 30, 2 x item 8 Washer Flat M8, and 1 x item 9 Nut Nyloc M8 as shown.
- Nip up fasteners. Do not tighten.

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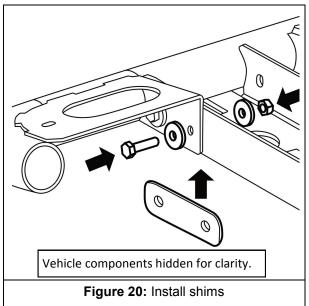


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## **Step 19:**

- Measure gap between joining faces of side step bracket and item 17 (19) right angle bracket RHS (LHS). If it is equal to or exceeds 1mm, undo and remove fasteners to fit Item 19 Shim 1mm
- If gap is less than 1mm, do not fit shim.
- If gap is greater than 1mm but less than 2mm, fit 1 x 1mm
  shim
- If gap is greater than 2mm, fit 2 x 1mm shim.
- Nip up the joint and remeasure the gap.





Skip step 20 if gap in step 19 is less than 1mm

## **Step 20:**

- Re-fit 1 x Item 7 Screw M8 x 30, 2 x Item 8 Washer Flat M8, and 1 x Item 9 Nut Nyloc M8 at first hole position closest to side step rail. (As per Step 18)
- Nip up but do not tighten.

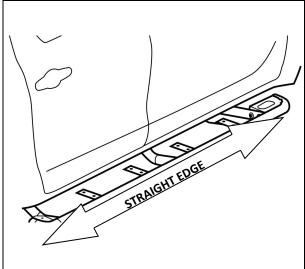


Figure 21: Check parallelism

## **Step 21:**

- Use a rule or straight edge to check and align parallelism of top surface of item 17 (18) right angle bracket RHS (LHS) to the top faces of the side step tread plate mounts. Take care not to mark surfaces.
- Tighten Item 7 screw M8 x 30.

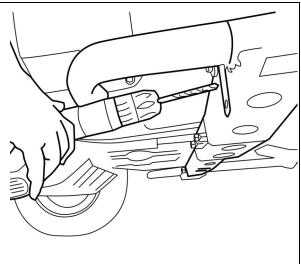


Screw M8 x 30 torque: 22 Nm

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## **Step 22:**

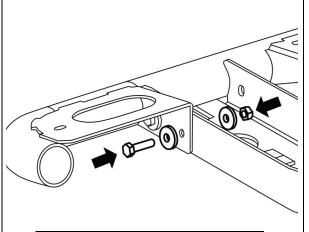
- Drill perpendicular to front support bracket using an 8.5mm drill bit and the pre-drilled hole in item 17 (18) right angle bracket RHS (LHS) as a guide.
- De-burr all sharp edges, remove swarf and apply rust inhibitor to bare metal surfaces.



**SAFETY** 

Wear suitable ear and eye protection when operating power drill.

Figure 22: Drill pinning hole



Vehicle components hidden for clarity.

Figure 23: Install pinning bolt

## **Step 23:**

- Finalise connection of item 17 (18) Right Angle Bracket RHS (LHS) to the step using 1 x Item 7 Screw M8 x 30, 2 x Item 8 Washer Flat M8 and 1 x Item 9 Nut Nyloc M8.
- Tighten fasteners.



Screw M8 x 30 torque: 22 Nm

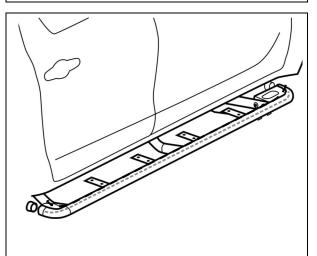


Figure 24: Apply anti vibration adhesive layer

# **Step 24:**

- Run a bead of clear polyurethane glue all the way along the top face of the side step rail to eliminate any vibration of the tread plate (item 20/21) against the side step.
- Take care not to apply too much polyurethane glue that may spread to visible surfaces after the tread plate (item 20/21) has been installed.



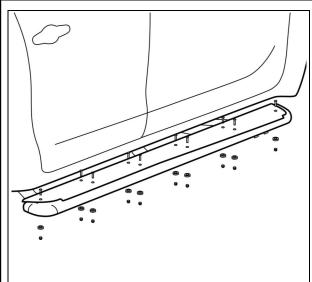
SAFETY

When using polyurethane glue, avoid breathing fumes and contact with skin.

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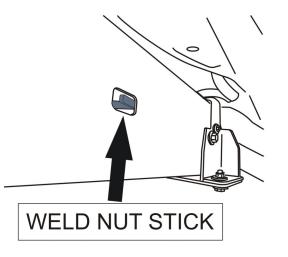
# **Step 25:**

- Secure Item 20 (21) Tread Plate RHS (LHS) to Item 1 (2) Side step RHS (LHS) brackets using the fasteners supplied as follows; 10 x Item 22 Bolt Cup Head M6 x 25, 10 x Item 8 Washer Flat M6 and 10 x Item 23 Nut Nyloc M6 using torque shown below.
- Tighten fasteners to the specified torque indicated below.



Nut Nyloc M6 torque: 4 Nm

Figure 25: Fit tread plate



Step 26:

- Push weld nut sticks into the hole and bend to secure in chassis access hole. Check to ensure it does not rattle.
- Do not break off nut stick



**NOTE** 

Ensure weld nut sticks are still accessible if removal is required

Figure 26: Secure weld nut extension sticks

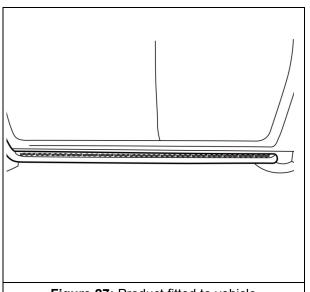


Figure 27: Product fitted to vehicle

## **Step 27:**

- Completed assembly shown (dual cab step LHS with side rail fitted).
- Clean up any polyurethane glue that may have spilled onto visible surfaces.

**END** 

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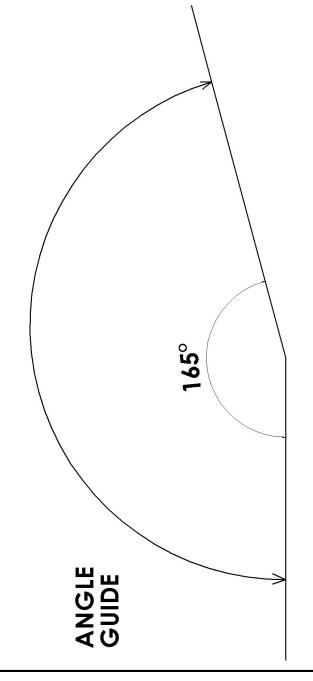


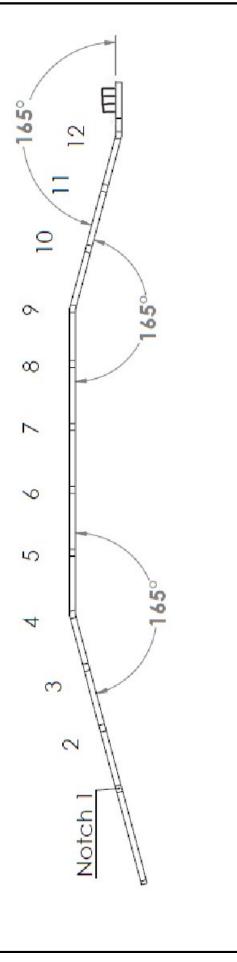
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## Weld Nut Assembly Bending Diagram, bending angles are approximate, and a guide only

### **Instructions:**

- Bend weld nut stick 15 degrees down at notch 4.
- Bend weld nut stick 15 degrees down at notch 9 as shown.
- Bend weld nut stick 15 degrees up at notch 12.





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