

# FITTING INSTRUCTIONS

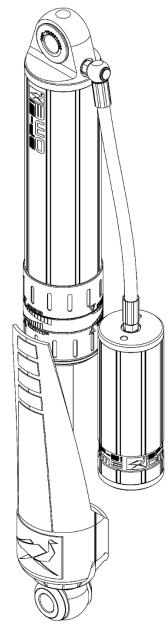
## BP5160028 / BP5160029 / BP5160052 / BP5160057

## TOYOTA LANDCRUISER 76/78/79 SERIES REAR

## **WARNING**

- This product must be installed exactly as per these instructions using only the hardware supplied.
- ♦ In the event of damage to any suspension component, contact your nearest authorised ARB stockist. Repairs or modifications to the suspension system components must not be attempted.
- Do not use this product for any vehicle make or model, other than those specified by ARB.
- ♦ Do not remove labels from suspension components.
- ♦ This product or its fixing must not be modified in any way.
- The installation of this product may require the use of specialized tools and/or techniques
- ♦ It is recommended that this product is only installed by trained personnel
- ♦ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ♦ Work safely at all times

Note: These fitting instructions should be read in conjunction with the vehicle workshop manual.

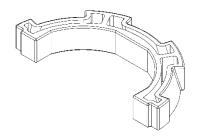


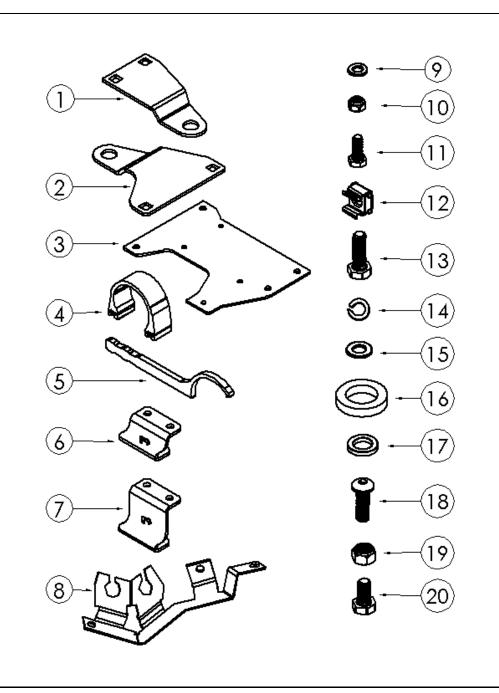
### FITTING KIT CONTENTS -

Item	Description	Qty.	Spare Part No.
1	RESI MOUNT LC76/78/79 REAR L	1	VE10020007SP
2	RESI MOUNT LC76/78/79 REAR R	1	VE10020008SP
3	RESI MOUNT LC76/78/79 REAR C	1	VE10020009SP
4	RESERVOIR CLAMP	2	VE10010003SP
5	ADJUSTER TOOL	1	VC10010071SP
6	BRKT BRAKE PROP REPOSITION 50	1	VF60050025
7	BRKT BRAKE PROP REPOSITION 80	1	VF60050026
8	BRKT BRAKELINE & ABS WIRE	1	VF60050032
9	WASHER M6 FLAT	4	VE70020005SP
10	NUT M6 NYLOC	4	VD60010003SP
11	BOLT M6x1.0X16	4	VD60030003SP
12	NUT M8 CAGED	4	6151301SP
13	BOLT M8x1.25x25	6	6151546SP
14	WASHER M8 SPRING	4	4584325SP
15	WASHER M8 FLAT	9	VE70020004SP
16	WASHER 20x32x6mm FLAT	2	VE70020008SP
17	SPACER WASHER 12x19x3mm	6	VE70020001SP
18	SCREW BUTTON HEAD CAP M8X1.25X25	1	6151464SP
19	NUT M8X1.25 NYLOC	2	6151212
20	BOLT M8X16X1.25	1	6151020

### **SUPPLIED WITH BP-51 DAMPER**

SHAFT GUARD RETAINERS (Spare Part No. VD31000003SP)





#### **AXLE HOUSING MOUNTED BRAKE BRACKETS**

The 76, 78 and 79 Series Landcruiser models have seen numerous changes to braking systems over the model's life. The following steps and photos highlight changes required to brackets and mounting hardware to provide clearance for the large body and reservoir of the BP-51.

#### For models equipped with ESC

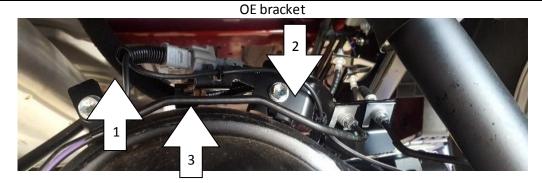
On models fitted with ESC the bracket that secures the brake lines to the axle housing may come into contact with the BP-51 at full compression.

#### Remove OE bracket

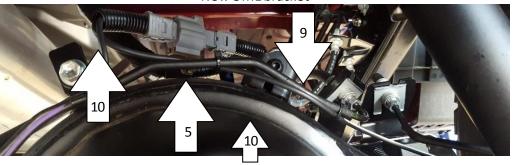
- 1. Unclip any wiring secured the bracket
- 2. Remove clips that secure the brake lines to the bracket
- 3. Remove bolt that secures the bracket to the axle housing
- 4. Cut bracket to remove from brake lines

#### Fit new bracket

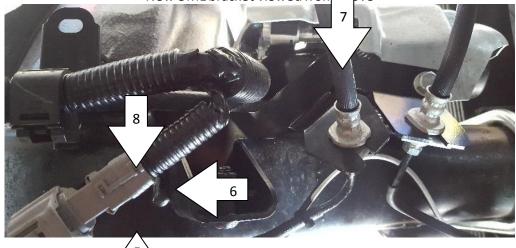
- 5. Fit M8 cap screw to bracket on axle housing
- 6. Fit new brakeline bracket to capscrew and secure finger tight with nyloc nut
- 7. Fit brakeline bracket to diff lock actuator using new M8X16 bolt and flat washer and fasten securely
- 8. Securely fasten nyloc nut to cap screw
- 9. Fit brakelines to new bracket and secure with OE clips
- 10. Fit loom to bracket and neatly cable tie ABS wires



New OME bracket







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# For axle housings with a bracket for ABS wire only. (see photos left)

Replace the OE fastener located on the top RHS of the axle housing (1) with the supplied M8 button head cap screw and flat washer (2).





# <u>For models without ESC that have a brake</u> <u>proportioning bracket</u>

There are two different brake proportioning brackets. Which one is fitted will depend on which leaf spring is fitted to the vehicle.

If the vehicle is fitted with a 200kg or 400kg rear leaf spring then a new 50mm tall brake proportioning bracket must be fitted to replace the existing one.

If the vehicle is fitted with a 600kg or 800kg rear leaf spring then a new 80mm tall brake proportioning bracket must be fitted to replace the existing one.

Ensure the bracket is fitted so that the arrow is facing forward of the vehicle.

Fit the bracket as shown in the image using the supplied M8X25 bolts, washers and nyloc nuts.



#### DAMPER PREPARATION

Before fitment, the Reservoir brackets need some assembly.

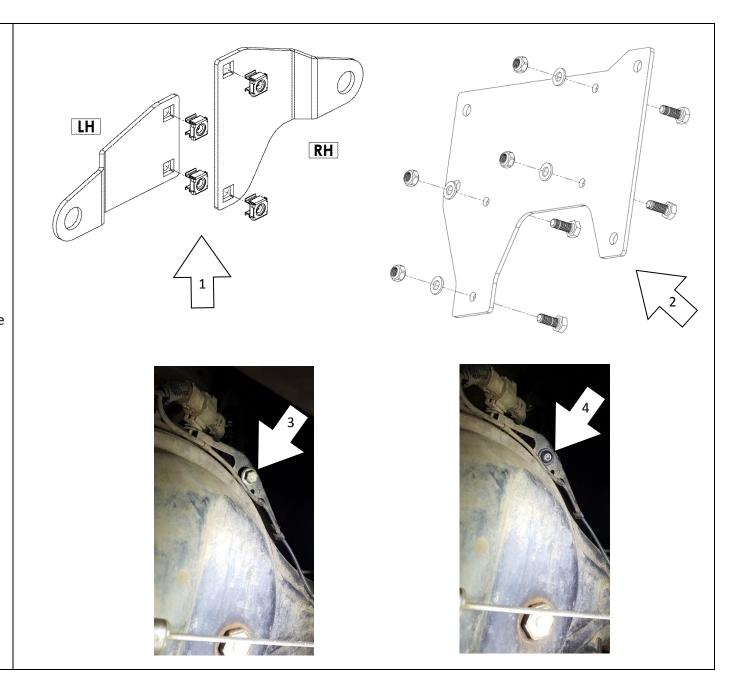
Left and right brackets are different.

Refer to diagrams for orientation of brackets when inserting M8 cage nuts (1).

Fit M6 bolts to the central mounting bracket and secure with Nyloc nut and flat washer (2).

Secure finger tight only at this stage.

Replace the OE fastener located on the top RHS of the differential pumpkin (3) with the supplied M8 button head cap screw and M8 washer (4).



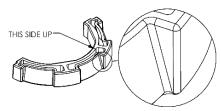
#### **SECURING SHAFT GUARDS**

The shaft guards are designed to protect the shaft from stones thrown from the front wheels and are mounted to the front side of the damper.

It is easiest to secure the shaft guards before the dampers are fitted to the vehicle.

### Please follow steps 1-3.

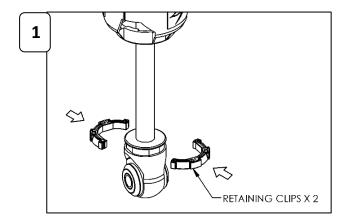
**1.** Fit the two retainers to the eyelet as shown. Note the orientation.

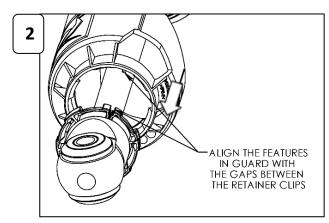


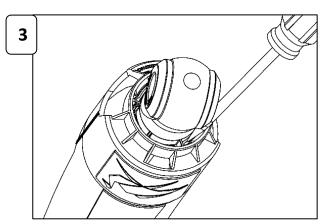
- 2. There are features on the shaft guard that locate in the gaps between the two retainers. Align the guard with these gaps and firmly pull the shaft guard down over the retainers to secure in place.
- **3.** Check retainers are completely secured by guard. Use a flat blade screwdriver to poke retainers under tabs on guard if required. Refer to pictures **(A)** and **(B)** for correct fitment.

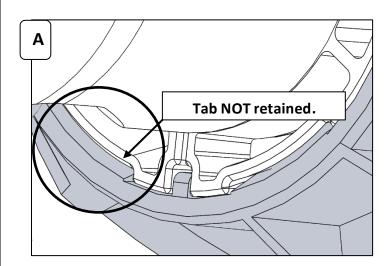
IMPORTANT: Ensure ALL tabs are fully retained.

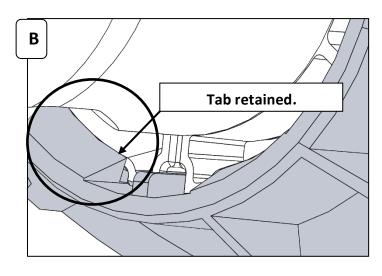
NOTE: Ensure the stone guard does not touch the brake hose once installed











IMPORTANT: Ensure ALL tabs are fully retained

#### **MOUNTING SEQUENCE**

Remove old dampers from vehicle.

The BP-51 needs to be fitted with the suspension in droop.

Mount the BP-51 dampers using the hardware in the sequence as shown in the diagram.

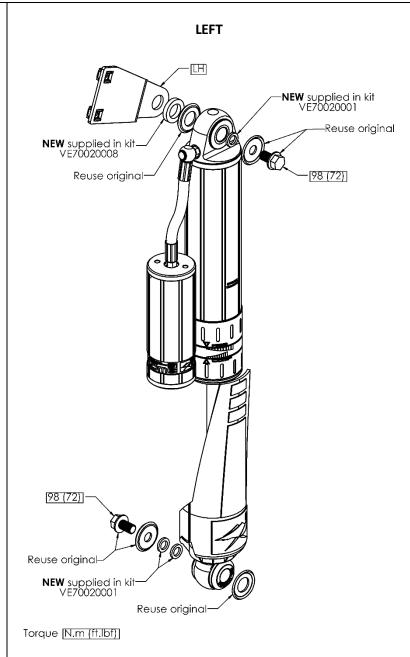
Fit the top mount and droop the wheel to secure the bottom mount.

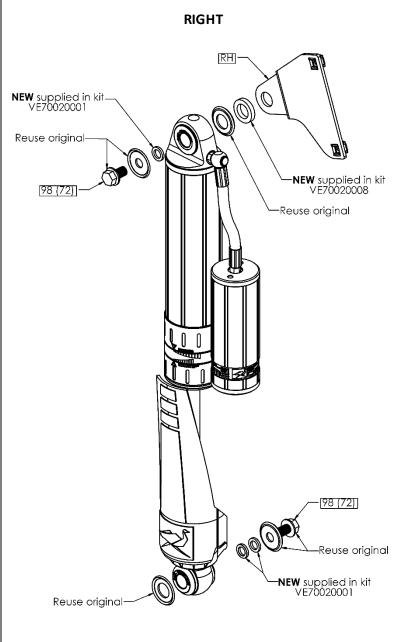
Ensure the hoses are clear of any obstructions and have no kinks. As tray and body fitments may vary, some fine tuning of the hose position may be required to ensure the hoses clear the underside of the tray/body and the diff housing.

Secure top and bottom mounting fasteners.



OE Mounting nuts: 98N.m (72 ft.lb)





# RESERVOIR MOUNTING SEQUENCE (LH SHOWN)

The first image shows how the LH & RH brackets should be positioned prior to mounting the reservoirs.

Fit the centre mounting plate using the M8 bolts, the spring washers and the flat washers supplied. The hexagonal head of the reservoir fasteners must be facing towards the front of the vehicle. If fitted ensure that the OE loom bracket is fastened along with the M8 fastener as shown (1).

Secure all 4 bolts finger tight only to begin with. Ensure the bracket is level then secure all fasteners.

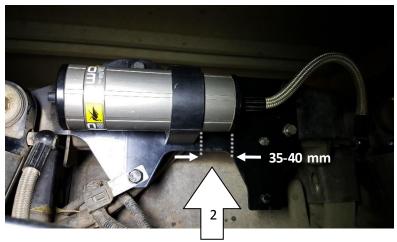
Slide the LHS saddle over the heads of the bolts in the mounting plate and then slide the reservoir through the saddle. Adjust the position of the LHS reservoir to the position shown (2).

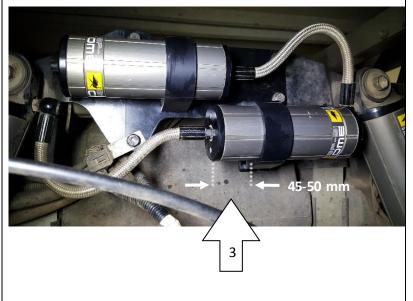
Repeat for the RHS reservoir as shown (3).

Now that all parts are fitted, ensure the reservoir hose is free of contact from any surfaces, rotate the reservoir within the saddle if necessary.









#### **BRAKE PROPORTIONING BRACKET**

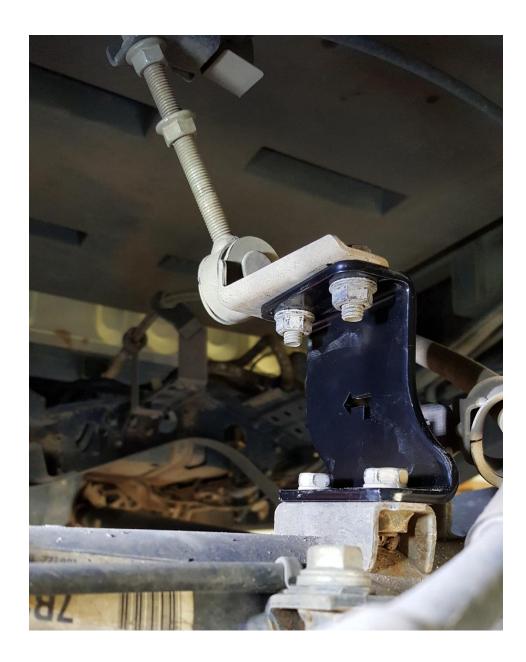
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Ensure the bracket is facing so that the arrow is facing forward of the vehicle.

Fit the bracket as shown in the image using the supplied M8 bolts, washers and nuts.



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#### **DAMPING ADJUSTMENT**

These dampers have been set in the factory to be used for a vehicle with certain load.

If your load or accessory fitment differs, use the table below as a guide for recommended compression and rebound adjuster settings.

Part Number	Rear Pay Load (kg)	Compression	Rebound
	0 - 200	0-4	0-4
BP5160028	200 - 400	2-6	2-6
	400+	4-8	6-10
	0 - 200	0-4	0-4
BP5160029	200 - 400	2-6	2-6
	400+	4-8	6-10
BP5160052	400 - 600	2-6	2-6
BP5160057	600+	4-8	6-10

#### **SPECIFICATIONS**

BP5160028 &	Extended Length	645 mm
BP5160057	Compressed Length	400 mm
BP5160029 &	Extended Length	685 mm
BP5160052	Compressed Length	420 mm

#### **SPARE PARTS**

Refer to Service and Parts Manual section:

- For BP5160026 see BP-51 S&P 3.1-BP5160028
- For BP5160026 see BP-51 S&P 3.1-BP5160029
- For BP5160052 see **BP-51 S&P 3.1-BP5160052**
- For BP5160057 see BP-51 S&P 3.1-BP5160057

### BP5160028, BP5160029, BP5160052 & BP5160057

